2020 Index IEEE Transactions on Automatic Control Vol. 65

This index covers all technical items—papers, correspondence, reviews, etc.—that appeared in this periodical during 2020, and items from previous years that were commented upon or corrected in 2020. Departments and other items may also be covered if they have been judged to have archival value.

The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Note that the item title is found only under the primary entry in the Author Index

AUTHOR INDEX

А

- Aberkane, S., and Dragan, V., On the Existence of the Stabilizing Solution of a Class of Periodic Stochastic Riccati Equations; *TAC March 2020 1288-1294*
- Acary, V., see Huber, O., TAC June 2020 2619-2626
- Adamiak, K., see Bartoszewicz, A., TAC April 2020 1807-1814
- Adamy, J., see Bernhard, S., TAC Oct. 2020 4416-4423
- Afshari, M., and Mahajan, A., Optimal Local and Remote Controllers With Unreliable Uplink Channels: An Elementary Proof; *TAC Aug. 2020 3616-3622*
- Aghdam, A.G., see Arabneydi, J., TAC Oct. 2020 4230-4245
- Ahmad, N.S., see Carrasco, J., TAC Nov. 2020 4538-4553
- Ahmadi, A.A., and El Khadir, B., On Algebraic Proofs of Stability for Homogeneous Vector Fields; *TAC Jan. 2020 325-332*
- Ahmadi, M., Israel, A., and Topcu, U., Safe Controller Synthesis for Data-Driven Differential Inclusions; *TAC Nov. 2020 4934-4940*
- Ahmed-Ali, T., Fridman, E., Giri, F., Kahelras, M., Lamnabhi-Lagarrigue, F., and Burlion, L., Observer Design For a Class of Parabolic Systems With Large Delays and Sampled Measurements; *TAC May 2020 2200-2206*
- Ahn, C.K., see Uribe-Murcia, K.J., TAC May 2020 2155-2162
- Ahn, C.K., see Shen, Y., TAC Jan. 2020 382-388
- Ahn, H., see Trinh, M.H., TAC June 2020 2339-2354
- Ahn, H., and Colombo, A., Abstraction-Based Safety Verification and Control of Cooperative Vehicles at Road Intersections; *TAC Oct. 2020 4061-4074*
- Ahn, H., see Trinh, M.H., TAC Oct. 2020 4186-4200
- Akyol, E., see Mao, Y., TAC Sept. 2020 3847-3862
- Alamir, M., On the Use of Supervised Clustering in Stochastic NMPC Design; TAC Dec. 2020 5392-5398
- Alaviani, S.S., and Elia, N., Distributed Multiagent Convex Optimization Over Random Digraphs; *TAC March 2020 986-998*
- Albertini, F., D'Alessandro, D., and Sheller, B., Sub-Riemannian Geodesics in SU(n/S(U(n-1×U(1))) and Optimal Control of Three Level Quantum Systems; TAC March 2020 1176-1191
- Aleksandrov, A., Fradkov, A., and Semenov, A., Delayed and Switched Control of Formations on a Line Segment: Delays and Switches Do Not Matter; *TAC Feb. 2020 794-800*
- Alessandri, A., and Boem, F., State Observers for Systems Subject to Bounded Disturbances Using Quadratic Boundedness; *TAC Dec. 2020 5352-5359*
- Alghunaim, S.A., Yuan, K., and Sayed, A.H., A Proximal Diffusion Strategy for Multiagent Optimization With Sparse Affine Constraints; *TAC Nov. 2020* 4554-4567
- Alghunaim, S.A., and Sayed, A.H., Distributed Coupled Multiagent Stochastic Optimization; *TAC Jan. 2020 175-190*
- Allen, J., see Moothedath, S., TAC Dec. 2020 5248-5263
- Allgower, F., see Kohler, J., TAC Aug. 2020 3576-3583
- Altafini, C., see Fontan, A., TAC May 2020 1855-1869

- Althoff, M., Reachability Analysis of Large Linear Systems With Uncertain Inputs in the Krylov Subspace; *TAC Feb. 2020 477-492*
- Altin, B., and Sanfelice, R.G., Hybrid Systems With Delayed Jumps: Asymptotic Stability via Robustness and Lyapunov Conditions; *TAC Aug. 2020* 3381-3396
- Amjad, R.A., Blochl, C., and Geiger, B.C., A Generalized Framework For Kullback–Leibler Markov Aggregation; *TAC July 2020 3068-3075*
- An, L., and Yang, G., Opacity Enforcement for Confidential Robust Control in Linear Cyber-Physical Systems; *TAC March 2020 1234-1241*
- Anastasopoulos, A., see Sinha, A., TAC Oct. 2020 4106-4121
- Anderson, B.D.O., see Qin, Y., TAC Feb. 2020 546-560
- Anderson, B.D.O., see Wang, X., TAC March 2020 1132-1143
- Anderson, B.D.O., see Zhou, J., TAC April 2020 1691-1696
- Anderson, B.D.O., see Ye, M., TAC Nov. 2020 4679-4694
- Andersson, S.B., see Yu, X., TAC April 2020 1499-1513
- Andradottir, S., see Hu, L., TAC Nov. 2020 4741-4752
- Andrieu, V., see Terrand-Jeanne, A., TAC Nov. 2020 4481-4492
- Andrieu, V., see Terrand-Jeanne, A., TAC Jan. 2020 58-71
- Andrievsky, B., see Orlov, Y., TAC April 2020 1484-1498
- Angeli, D., see Pasquini, M., TAC Aug. 2020 3333-3348
- Angulo, S., Marquez, R., and Bernal, M., Quasi-Polynomial-Based Robust Stability of Time-Delay Systems Can be Less Conservative Than Lyapunov– Krasovskii Approaches; *TAC July 2020 3164-3169*
- Anguluri, R., Katewa, V., and Pasqualetti, F., Centralized Versus Decentralized Detection of Attacks in Stochastic Interconnected Systems; *TAC Sept. 2020* 3903-3910
- Annaswamy, A.M., see Qu, Z., TAC July 2020 3023-3038
- Antsaklis, P., see Yan, Y., TAC Aug. 2020 3241-3255
- Antsaklis, P.J., see Rahnama, A., TAC Oct. 2020 4170-4185
- Apaza-Perez, W.A., Moreno, J.A., and Fridman, L., Global Sliding Mode Observers for Some Uncertain Mechanical Systems; *TAC March 2020 1348-1355*
- Arabneydi, J., and Aghdam, A.G., Deep Teams: Decentralized Decision Making With Finite and Infinite Number of Agents; *TAC Oct. 2020 4230-4245*
- Askarzadeh, Z., Fu, R., Halder, A., Chen, Y., and Georgiou, T.T., Stability Theory of Stochastic Models in Opinion Dynamics; *TAC Feb. 2020 522-533*
- Astolfi, A., see Franco, P.D., TAC May 2020 2107-2122
- Astolfi, A., see Padoan, A., TAC Aug. 2020 3647-3654
- Astolfi, A., see Sassano, M., TAC Aug. 2020 3229-3240
- Astolfi, A., see Sassano, M., TAC Dec. 2020 5312-5327
- Astolfi, A., see Sassano, M., TAC Oct. 2020 4016-4030
- Astolfi, D., Postoyan, R., and Nesic, D., Uniting Observers; *TAC July 2020* 2867-2882
- Athalye, C.D., Pal, D., and Pillai, H.K., Behavior ofnInfinite Chains of Kinematic Points With the Immediate-Neighbors Interaction Dynamics; TAC July 2020 2929-2940
- Auriol, J., see Bou Saba, D., TAC July 2020 2941-2956

B

- Ba, Q., and Savla, K., Computing Optimal Control of Cascading Failure in DC Networks; *TAC June 2020 2402-2417*
- Baar, W., see Jia, J., TAC Oct. 2020 3977-3990
- Badri, V., Tavazoei, M.S., and Yazdanpanah, M.J., Global Stabilization of Uncertain Lotka–Volterra Systems via Positive Nonlinear State Feedback; *TAC Dec.* 2020 5450-5455
- Bajovic, D., see Jerinkic, N.K., TAC Feb. 2020 846-853
- Baldi, S., and Frasca, P., Leaderless Synchronization of Heterogeneous Oscillators by Adaptively Learning the Group Model; TAC Jan. 2020 412-418
- Bamieh, B., see Siami, M., TAC Feb. 2020 733-740

- Bamieh, B., and Filo, M., An Input–Output Approach to Structured Stochastic Uncertainty; *TAC Dec. 2020 5012-5027*
- Baotic, M., see Novoselnik, B., TAC Feb. 2020 649-663
- Baras, J.S., see Maity, D., TAC Feb. 2020 604-619
- Barboni, A., Rezaee, H., Boem, F., and Parisini, T., Detection of Covert Cyber-Attacks in Interconnected Systems: A Distributed Model-Based Approach; *TAC Sept. 2020 3728-3741*

Barbot, J., see Ghanes, M., TAC Dec. 2020 5407-5414

- Barmish, B.R., see Hsieh, C., TAC July 2020 3143-3149
- Barrau, A., and Bonnabel, S., Extended Kalman Filtering With Nonlinear Equality Constraints: A Geometric Approach; *TAC June 2020 2325-2338*
- Barreiro-Gomez, J., Duncan, T.E., Pasik-Duncan, B., and Tembine, H., Semiexplicit Solutions to Some Nonlinear Nonquadratic Mean-Field-Type Games: A Direct Method; *TAC June 2020 2582-2597*
- Bartosiewicz, Z., see Carravetta, F., TAC Feb. 2020 867-873
- Bartoszewicz, A., and Adamiak, K., Discrete-Time Sliding-Mode Control With a Desired Switching Variable Generator; *TAC April 2020 1807-1814*
- Basar, T., see Chen, X., TAC June 2020 2536-2549
- Basile, F., see Li, L., TAC Jan. 2020 237-251
- Battilotti, S., Continuous-Time and Sampled-Data Stabilizers for Nonlinear Systems With Input and Measurement Delays; *TAC April 2020 1568-1583*
- Bechlioulis, C.P., see Dimanidis, I.S., TAC Dec. 2020 5058-5069
- Bemporad, A., see Saraf, N., TAC March 2020 1242-1247
- Ben Avraham, T., Sharon, G., Zarai, Y., and Margaliot, M., Dynamical Systems With a Cyclic Sign Variation Diminishing Property; *TAC March 2020 941-954*
- Benner, P., see Pontes Duff, I., TAC June 2020 2526-2535
- Bensoussan, A., Cass, T., Chau, M.H.M., and Yam, S.C.P., Mean Field Games With Parametrized Followers; *TAC Jan. 2020 12-27*
- Bernal, M., see Angulo, S., TAC July 2020 3164-3169
- Bernhard, S., and Adamy, J., Optimal Output Regulation for Square, Overactuated and Underactuated Linear Systems; *TAC Oct. 2020 4416-4423*
- Berntorp, K., see Danielson, C., TAC Oct. 2020 4456-4463
- Besselink, B., see Kawano, Y., TAC May 2020 2094-2106
- Besselink, B., see Kawano, Y., TAC Aug. 2020 3486-3501
- Beuchat, P.N., Georghiou, A., and Lygeros, J., Performance Guarantees for Model-Based Approximate Dynamic Programming in Continuous Spaces; *TAC Jan. 2020 143-158*
- Bhatnagar, S., see Yaji, V.G., TAC March 2020 1100-1115
- Bhatnagar, S., see Prashanth, L.A., TAC June 2020 2450-2465
- Bhavsar, N., see Prashanth, L.A., TAC June 2020 2450-2465
- Biemond, J.J.B., see Rijnen, M., TAC Nov. 2020 4568-4583
- Bin, M., and Marconi, L., "Class-Type" Identification-Based Internal Models in Multivariable Nonlinear Output Regulation; *TAC Oct. 2020 4369-4376*
- Blochl, C., see Amjad, R.A., TAC July 2020 3068-3075
- Bobtsov, A.A., see Wang, J., TAC April 2020 1731-1738
- Boem, F., see Li, P., TAC July 2020 3053-3059
- Boem, F., see Alessandri, A., TAC Dec. 2020 5352-5359
- Boem, F., see Gallo, A.J., TAC Sept. 2020 3800-3815
- Boem, F., see Barboni, A., TAC Sept. 2020 3728-3741
- Boisliveau, R., see Ghanes, M., TAC Dec. 2020 5407-5414
- Bonalli, R., Herisse, B., and Trelat, E., Optimal Control of Endoatmospheric Launch Vehicle Systems: Geometric and Computational Issues; *TAC June* 2020 2418-2433
- Bonnabel, S., see Barrau, A., TAC June 2020 2325-2338
- Bonnet, C., see Cardeliquio, C.B., TAC April 2020 1640-1646
- Boom, T.J.J.v.d., Xu, J., and De Schutter, B., Corrections to "Model Predictive Control for Stochastic Max-Plus Linear Systems With Chance Constraints," *TAC Feb. 2020 905-906*
- Borgioli, F., and Michiels, W., A Novel Method to Compute the Structured Distance to Instability for Combined Uncertainties on Delays and System Matrices; *TAC April 2020 1747-1754*
- Boskos, D., see Pereira, P.O., TAC Jan. 2020 271-278
- Bottegal, G., see Risuleo, R.S., TAC July 2020 2801-2813
- Bou Saba, D., Bribiesca-Argomedo, F., Auriol, J., Di Loreto, M., and Di Meglio, F., Stability Analysis for a Class of Linear 2 × 2 Hyperbolic PDEs Using a Backstepping Transform; *TAC July 2020 2941-2956*
- Boutat, D., see Saadi, W., TAC June 2020 2700-2707

- Braberman, V., see Ciolek, D.A., TAC Aug. 2020 3502-3516
- Bregman, S.C., see Kolarijani, A.S., TAC Aug. 2020 3517-3529
- Bribiesca-Argomedo, F., see Bou Saba, D., TAC July 2020 2941-2956
- Brogliato, B., see Huber, O., TAC June 2020 2619-2626
- Brogliato, B., see Vieira, A., TAC June 2020 2743-2750
- Brogliato, B., Polyakov, A., and Efimov, D., The Implicit Discretization of the Supertwisting Sliding-Mode Control Algorithm; *TAC Aug. 2020 3707-3713*
- Brogliato, B., see Ferrante, A., TAC Jan. 2020 450-452
- Bruce-Doust, R., and White, L.B., A Forgetting Property of Reciprocal Chains; *TAC Nov. 2020 4854-4859*
- Bucolo, M., Buscarino, A., Fortuna, L., Frasca, M., and Nunnari, G., Hankel Singular Values and LQG Characteristic Values of Discrete-Time Linear Systems in Cascade With Inner Systems; *TAC Nov. 2020* 4989-4994
- Bujorianu, M.L., see Wisniewski, R., TAC Dec. 2020 5220-5235
- Bullo, F., see Chen, Z., TAC Sept. 2020 3725-3727
- Bullo, F., see Duan, X., TAC Jan. 2020 72-86
- Burlion, L., see Ahmed-Ali, T., TAC May 2020 2200-2206
- Burlion, L., see Nicotra, M.M., TAC Aug. 2020 3677-3684
- Buscarino, A., Fortuna, L., Frasca, M., and Nunnari, G., Cascading With Inner Systems: Hankel Singular Values and Characteristic Values; *TAC Feb. 2020* 727-732
- Buscarino, A., see Bucolo, M., TAC Nov. 2020 4989-4994
- Bushnell, L., see Moothedath, S., TAC Dec. 2020 5248-5263
- Buzi, G., see Siami, M., TAC Feb. 2020 733-740

С

- Cacace, F., Cusimano, V., Germani, A., Palumbo, P., and Papi, M., Optimal Continuous-Discrete Linear Filter and Moment Equations for Nonlinear Diffusions; *TAC Oct. 2020 3961-3976*
- Cai, B., Zhang, L., and Shi, Y., Observed-Mode-Dependent State Estimation of Hidden Semi-Markov Jump Linear Systems; *TAC Jan. 2020 442-449*
- Cai, J., see Wang, L., TAC Oct. 2020 4340-4347
- Cai, K., see Zhang, R., TAC Jan. 2020 295-301
- Cai, L., see Chai, Y., TAC March 2020 1073-1088
- Cai, S., and Lau, V.K.N., MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels; *TAC May* 2020 2046-2061
- Caines, P.E., see Gao, S., TAC Oct. 2020 4090-4105
- Cairano, S.D., see Danielson, C., TAC Oct. 2020 4456-4463
- Caldeira, A.F., see Coutinho, D., TAC May 2020 2300-2307
- Caluya, K.F., and Halder, A., Gradient Flow Algorithms for Density Propagation in Stochastic Systems; *TAC Oct. 2020 3991-4004*
- Camlibel, M.K., see Jiao, J., TAC March 2020 1218-1225
- Camlibel, M.K., see Jozsa, M., TAC Aug. 2020 3623-3630
- Camlibel, M.K., see van Waarde, H.J., TAC Nov. 2020 4753-4768
- Camlibel, M.K., see van Waarde, H.J., TAC Nov. 2020 4525-4537
- Camlibel, M.K., see Jia, J., TAC Oct. 2020 3977-3990
- Cao, J., see Cheng, J., TAC Nov. 2020 4816-4823
- Cao, J., see Shi, X., TAC Nov. 2020 4874-4881
- Cao, J., see Li, X., TAC Nov. 2020 4908-4913
- Cao, K., Han, Z., Li, X., and Xie, L., Ratio-of-Distance Rigidity Theory With Application to Similar Formation Control; *TAC June 2020 2598-2611*
- Cao, M., see Qin, Y., TAC Feb. 2020 546-560
- Cao, M., see Kawano, Y., TAC May 2020 2094-2106
- Cao, M., see Kawano, Y., TAC Aug. 2020 3486-3501
- Cao, M., see Kawano, Y., TAC Sept. 2020 3863-3878
- Cao, M., see Ye, M., TAC Nov. 2020 4679-4694
- Cao, X., Stochastic Control of Multidimensional Systems With Relative Optimization; TAC May 2020 1886-1900
- Cao, X., and Liu, K.J.R., Dynamic Sharing Through the ADMM; *TAC May* 2020 2215-2222
- Cao, Z., Niu, Y., and Song, J., Finite-Time Sliding-Mode Control of Markovian Jump Cyber-Physical Systems Against Randomly Occurring Injection Attacks; *TAC March 2020 1264-1271*
- Cappellaro, P., see Wang, Y., TAC Nov. 2020 4632-4647

- Cardeliquio, C.B., Fioravanti, A.R., Bonnet, C., and Niculescu, S., Stability and Stabilization Through Envelopes for Retarded and Neutral Time-Delay Systems; *TAC April 2020 1640-1646*
- Carr, S., see Ornik, M., TAC Nov. 2020 4800-4807
- Carrasco, J., Heath, W.P., Zhang, J., Ahmad, N.S., and Wang, S., Convex Searches for Discrete-Time Zames–Falb Multipliers; *TAC Nov. 2020 4538-4553*
- Carravetta, F., Sarafrazi, M.A., Bartosiewicz, Z., and Kotta, U., A Test for the Generic Strong Accessibility of Meromorphic Nonlinear Systems; *TAC Feb.* 2020 867-873
- Carravetta, F., see White, L.B., TAC Jan. 2020 389-396
- Casau, P., Cunha, R., Sanfelice, R.G., and Silvestre, C., Hybrid Control for Robust and Global Tracking on Smooth Manifolds; *TAC May 2020 1870-1885* Cass, T., see Bensoussan, A., *TAC Jan. 2020 12-27*
- Cassandras, C.G., see Yu, X., TAC April 2020 1499-1513
- Castro, R.d.S., Flores, J.V., Salton, A.T., Chen, Z., and Coutinho, D.F., A Stabilization Framework for the Output Regulation of Rational Nonlinear Systems; *TAC Nov. 2020 4860-4865*
- Cerpa, E., and Prieur, C., Singular Perturbation Analysis of a Coupled System Involving the Wave Equation; *TAC Nov. 2020 4846-4853*
- Cetinkaya, A., see Wakaiki, M., TAC Aug. 2020 3560-3575
- Chai, L., see Yi, J., TAC Jan. 2020 191-206
- Chai, T., see Jiang, Y., TAC Nov. 2020 4965-4972
- Chai, Y., and Cai, L., Realization of Reachability for the Control of a Class of Nonlinear Systems; *TAC March 2020 1073-1088*
- Chakravorty, J., and Mahajan, A., Remote Estimation Over a Packet-Drop Channel With Markovian State; *TAC May 2020 2016-2031*
- Chandan, R., see Paccagnan, D., TAC Nov. 2020 4616-4631
- Chang, D.E., Phogat, K.S., and Choi, J., Model Predictive Tracking Control for Invariant Systems on Matrix Lie Groups via Stable Embedding Into Euclidean Spaces; *TAC July 2020 3191-3198*
- Chaporkar, P., see Joshi, A., TAC Dec. 2020 5517-5524
- Chasparis, G.C., Corrections to "Stochastic Stability of Perturbed Learning Automata in Positive-Utility Games" [Nov 19 4454-4469]; *TAC April 2020 1822*
- Chau, M.H.M., see Bensoussan, A., TAC Jan. 2020 12-27
- Cheah, C.C., see Wang, H., TAC June 2020 2760-2767
- Chen, C., Raman, A., Hu, H., and Sreenivas, R.S., On Liveness Enforcing Supervisory Policies for Arbitrary Petri Nets; *TAC Dec. 2020 5236-5247*
- Chen, F., and Chen, J., Minimum-Energy Distributed Consensus Control of Multiagent Systems: A Network Approximation Approach; *TAC March 2020* 1144-1159
- Chen, G., see Meng, H., TAC April 2020 1683-1690
- Chen, G., Su, W., Ding, S., and Hong, Y., Heterogeneous Hegselmann–Krause Dynamics With Environment and Communication Noise; *TAC Aug. 2020* 3409-3424
- Chen, G., see He, W., TAC Sept. 2020 3879-3886
- Chen, G., Yang, Q., Song, Y., and Lewis, F.L., A Distributed Continuous-Time Algorithm for Nonsmooth Constrained Optimization; *TAC Nov. 2020 4914-4921* Chen, H., see Lei, J., *TAC Feb. 2020 664-679*
- Chen, H., Wang, Z., Liang, J., and Li, M., State Estimation for Stochastic Time-Varying Boolean Networks; *TAC Dec. 2020 5480-5487*
- Chen, J., see Chen, F., TAC March 2020 1144-1159
- Chen, J., see Wei, Y., TAC April 2020 1800-1806
- Chen, J., see Ren, X., TAC Sept. 2020 3742-3757
- Chen, J., see Fang, C., TAC Sept. 2020 3927-3934
- Chen, J., see Wu, G., TAC Sept. 2020 3919-3926
- Chen, J., Ding, F., Zhu, Q., and Liu, Y., Interval Error Correction Auxiliary Model Based Gradient Iterative Algorithms for Multirate ARX Models; *TAC* Oct. 2020 4385-4392
- Chen, J., see Cheng, P., TAC Oct. 2020 4348-4355
- Chen, L., see Zhou, X., TAC June 2020 2387-2401
- Chen, L., Mei, J., Li, C., and Ma, G., Distributed Leader–Follower Affine Formation Maneuver Control for High-Order Multiagent Systems; *TAC Nov.* 2020 4941-4948
- Chen, L., see Nakahira, Y., TAC Nov. 2020 4781-4792
- Chen, S., see Jiang, X., TAC Dec. 2020 5399-5406
- Chen, T., see Jiang, Y., TAC Nov. 2020 4965-4972
- Chen, T., see Yu, H., TAC Nov. 2020 4866-4873

- Chen, W., see Yang, J., TAC May 2020 2230-2236
- Chen, X., Gao, Z., and Basar, T., Asymptotic Behavior of Conjunctive Boolean Networks Over Weakly Connected Digraphs; *TAC June 2020 2536-2549*
- Chen, X., see Feng, Y., TAC May 2020 2272-2277
- Chen, X., see Yu, H., TAC Nov. 2020 4866-4873
- Chen, Y., see Askarzadeh, Z., TAC Feb. 2020 522-533
- Chen, Y., see Liu, S., TAC March 2020 1303-1309
- Chen, Y., Georgiou, T.T., and Tannenbaum, A., Stochastic Control and Nonequilibrium Thermodynamics: Fundamental Limits; *TAC July 2020 2979-2991*
- Chen, Z., see Yin, X., TAC July 2020 3112-3119
- Chen, Z., see Khan, G.D., TAC Aug. 2020 3592-3599
- Chen, Z., Pasqualetti, F., He, J., Cheng, P., Trentelman, H.L., and Bullo, F., Guest Editorial: Special Issue on Security and Privacy of Distributed Algorithms and Network Systems; *TAC Sept. 2020 3725-3727*
- Chen, Z., see Castro, R.d.S., TAC Nov. 2020 4860-4865
- Cheng, D., see Zhang, X., TAC June 2020 2730-2735
- Cheng, D., Xu, Z., and Shen, T., Equivalence-Based Model of Dimension-Varying Linear Systems; *TAC Dec. 2020 5444-5449*
- Cheng, J., Park, J.H., Zhao, X., Karimi, H.R., and Cao, J., Quantized Nonstationary Filtering of Networked Markov Switching RSNSs: A Multiple Hierarchical Structure Strategy; *TAC Nov. 2020 4816-4823*
- Cheng, P., see Chen, Z., TAC Sept. 2020 3725-3727
- Cheng, P., Yang, Z., Chen, J., Qi, Y., and Shi, L., An Event-Based Stealthy Attack on Remote State Estimation; *TAC Oct. 2020 4348-4355*
- Cheng, X., and Scherpen, J.M.A., Clustering-Based Model Reduction of Laplacian Dynamics With Weakly Connected Topology; *TAC Oct. 2020 4393-4399*
- Chentouf, B., and Han, Z., On the Stabilization of an Overhead Crane System With Dynamic and Delayed Boundary Conditions; *TAC Oct. 2020 4273-4280*
- Cherukuri, A., and Cortes, J., Cooperative Data-Driven Distributionally Robust Optimization; *TAC Oct. 2020 4400-4407*
- Chesi, G., see Su, L., TAC Nov. 2020 4902-4907
- Chesi, G., and Colaneri, P., Structured Feedback Synthesis for Stability and Performance of Switched Systems; *TAC Nov. 2020 4695-4709*
- Chitour, Y., see Marx, S., TAC May 2020 2139-2146
- Chitour, Y., see Obeid, H., TAC Nov. 2020 4928-4933
- Choi, J., see Chang, D.E., TAC July 2020 3191-3198
- Chong, E.K.P., see Peng, Y., TAC June 2020 2647-2653
- Chou, Y., see Wu, J., TAC Feb. 2020 771-777
- Ciccone, V., Ferrante, A., and Zorzi, M., Learning Latent Variable Dynamic Graphical Models by Confidence Sets Selection; *TAC Dec. 2020 5130-5143*
- Ciolek, D.A., Braberman, V., D'Ippolito, N., Sardina, S., and Uchitel, S., Compositional Supervisory Control via Reactive Synthesis and Automated Planning; *TAC Aug. 2020 3502-3516*
- Clark, A., see Niu, L., TAC June 2020 2434-2449
- Clark, A., see Moothedath, S., TAC Dec. 2020 5248-5263
- Cleaveland, R., see Ramasubramanian, B., TAC April 2020 1442-1455
- Clemens, J.W., and Speyer, J.L., On the LQG Game With Nonclassical Information Pattern Using a Direct Solution Method; *TAC May 2020 2078-2093*
- Colaneri, P., see Chesi, G., TAC Nov. 2020 4695-4709
- Colaneri, P., see Ning, Z., TAC Jan. 2020 159-174
- Colombo, A., see Ahn, H., TAC Oct. 2020 4061-4074
- Colombo, L.J., see Goodman, J.R., TAC April 2020 1815-1821
- Colombo, L.J., and Dimarogonas, D.V., Symmetry Reduction in Optimal Control of Multiagent Systems on Lie Groups; *TAC Nov. 2020 4973-4980*
- Coluccia, A., see Sasso, F., TAC Jan. 2020 223-236
- Commault, C., Structural Controllability of Networks With Dynamical Structured Nodes; *TAC June 2020 2736-2742*
- Cong, S., see Zhang, J., TAC July 2020 2856-2866
- Cortes, J., see Khojasteh, M.J., TAC March 2020 925-940
- Cortes, J., see Cherukuri, A., TAC Oct. 2020 4400-4407
- Costa, E.F., see Narvaez, A.R.R., TAC May 2020 2265-2271
- Costa, O.L.V., see Zabala, Y.A., TAC March 2020 1211-1217
- Cotorruelo, A., Limon, D., and Garone, E., Output Admissible Sets and Reference Governors: Saturations Are Not Constraints!; *TAC March 2020 1192-1196*

- Coutinho, D., de Souza, C.E., Gomes da Silva, J.M., Caldeira, A.F., and Prieur, C., Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems; *TAC May 2020 2300-2307*
- Coutinho, D.F., see Castro, R.d.S., TAC Nov. 2020 4860-4865
- Cruz-Zavala, E., see Zamora-Gomez, G.I., TAC Feb. 2020 882-889
- Cruz-Zavala, E., and Moreno, J.A., Higher Order Sliding Mode Control Using Discontinuous Integral Action; *TAC Oct. 2020* 4316-4323
- Cubuktepe, M., see Savas, Y., TAC April 2020 1552-1567
- Cunha, R., see Casau, P., TAC May 2020 1870-1885
- Cusimano, V., see Cacace, F., TAC Oct. 2020 3961-3976

D

- D'Alessandro, D., see Albertini, F., TAC March 2020 1176-1191
- D'Ippolito, N., see Ciolek, D.A., TAC Aug. 2020 3502-3516
- Daafouz, J., see Varma, V.S., TAC Oct. 2020 4324-4331
- Dalkiran, N.A., and Yuksel, S., Stochastic Control Approach to Reputation Games; *TAC Nov. 2020 4710-4725*
- Dall'Anese, E., see Zhou, X., TAC June 2020 2387-2401
- Damm, T., see Sato, K., TAC Nov. 2020 4493-4508
- Danielson, C., Berntorp, K., Weiss, A., and Cairano, S.D., Robust Motion Planning for Uncertain Systems With Disturbances Using the Invariant-Set Motion Planner; *TAC Oct. 2020 4456-4463*
- Darivianakis, G., Eichler, A., and Lygeros, J., Distributed Model Predictive Control for Linear Systems With Adaptive Terminal Sets; *TAC March 2020* 1044-1056
- Darouach, M., and Fernando, T., On the Existence and Design of Functional Observers; *TAC June 2020 2751-2759*
- Davila, J., see Rios, H., TAC June 2020 2640-2646
- Davoudi, A., see Zuo, S., TAC July 2020 3104-3111
- de Andrade, G.A., Vazquez, R., and Pagano, D.J., Backstepping-Based Estimation of Thermoacoustic Oscillations in a Rijke Tube With Experimental Validation; *TAC Dec. 2020 5336-5343*
- de Cossio, F.G., Nadri, M., and Dufour, P., Observer Design for Nonlinear Systems With Output Transformation; *TAC Dec. 2020 5205-5219*
- de Oliveira, A.M., see Varma, V.S., TAC Oct. 2020 4324-4331
- De Persis, C., and Tesi, P., Formulas for Data-Driven Control: Stabilization, Optimality, and Robustness; *TAC March 2020 909-924*
- **De Persis, C.,** and Grammatico, S., Continuous-Time Integral Dynamics for a Class of Aggregative Games With Coupling Constraints; *TAC May 2020* 2171-2176
- De Persis, C., see Shi, M., TAC Jan. 2020 263-270
- de Ruiter, A.H.J., see Ghodrat, M., TAC June 2020 2708-2715
- De Schutter, B., see Boom, T.J.J.v.d., TAC Feb. 2020 905-906
- de Souza, C.E., see Coutinho, D., TAC May 2020 2300-2307
- Defoort, M., see Zuo, Z., TAC April 2020 1771-1778
- Defoort, M., see Jimenez-Rodriguez, E., TAC Nov. 2020 4922-4927
- Deng, F., see Zhang, Z., TAC Feb. 2020 874-881
- Deng, F., see Zhang, B., TAC March 2020 1318-1324
- Deng, F., see Luo, S., TAC July 2020 3084-3091
- Deng, F., see Liu, L., TAC Dec. 2020 5384-5391
- Deng, F., see Luo, S., TAC Jan. 2020 369-375
- Deshmukh, A., and Ghosh, A., Analysis and Design of Continuous-Time Multivariable Periodic Controllers: An H_{oo}/LTR-Based Approach; *TAC Aug. 2020* 3608-3615
- Deutscher, J., and Gabriel, J., Fredholm Backstepping Control of Coupled Linear Parabolic PDEs With Input and Output Delays; *TAC July 2020 3128-3135*
- Deutscher, J., see Kerschbaum, S., TAC July 2020 3060-3067
- **Deutscher, J.,** and Kerschbaum, S., Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs; *TAC May 2020 2207-2214*
- Dey, A., Patra, S., and Sen, S., Integral Control of Stable Negative-Imaginary Systems Preceded by Hysteresis Nonlinearity; *TAC March 2020 1333-1339*
- Dhingra, N.K., see Zare, A., TAC Aug. 2020 3441-3456
- Di Loreto, M., see Bou Saba, D., TAC July 2020 2941-2956
- Di Meglio, F., see Bou Saba, D., TAC July 2020 2941-2956

- Diblik, J., and Mencakova, K., A Note on Relative Controllability of Higher Order Linear Delayed Discrete Systems; *TAC Dec. 2020 5472-5479*
- Dimanidis, I.S., Bechlioulis, C.P., and Rovithakis, G.A., Output Feedback Approximation-Free Prescribed Performance Tracking Control for Uncertain MIMO Nonlinear Systems; *TAC Dec. 2020 5058-5069*
- Dimarogonas, D.V., see Hashimoto, K., TAC Feb. 2020 561-576
- Dimarogonas, D.V., see Colombo, L.J., TAC Nov. 2020 4973-4980
- Dimarogonas, D.V., see Pereira, P.O., TAC Jan. 2020 271-278
- Ding, D., Wang, Z., and Han, Q., A Set-Membership Approach to Event-Triggered Filtering for General Nonlinear Systems Over Sensor Networks; *TAC April 2020 1792-1799*
- Ding, F., see Chen, J., TAC Oct. 2020 4385-4392
- Ding, S., see Chen, G., TAC Aug. 2020 3409-3424
- Ding, S.X., see Gao, Q., TAC Aug. 2020 3693-3700
- Ding, S.X., see Zhong, M., TAC Oct. 2020 4464-4471
- Ding, Z., see Zuo, Z., TAC April 2020 1771-1778
- Ding, Z., see Li, Z., TAC April 2020 1763-1770
- Ding, Z., see Yin, X., TAC Jan. 2020 376-381
- Djaneye-Boundjou, O., and Ordonez, R., Gradient-Based Discrete-Time Concurrent Learning for Standalone Function Approximation; *TAC Feb. 2020* 749-756
- Dobrowiecki, T.P., see Schoukens, M., TAC April 2020 1514-1524
- Dochain, D., see Hastir, A., TAC April 2020 1525-1536
- Dochain, D., see Rapaport, A., TAC June 2020 2693-2699
- Dominguez-Garcia, A.D., see Hadjicostis, C.N., TAC Sept. 2020 3887-3894
- Donaire, A., see Ferguson, J., TAC April 2020 1710-1715
- Donaire, A., Romero, J.G., and Ortega, R., Correction to the Paper "A Robust IDA-PBC Approach for Handling Uncertainties in Underactuated Mechanical Systems" [Oct 18 3495-3502]; *TAC July 2020 3223-3226*
- Dong, D., see Gao, Q., TAC Aug. 2020 3693-3700
- Dong, D., see Wang, Y., TAC Nov. 2020 4632-4647
- Dong, R., see Westenbroek, T., TAC April 2020 1537-1551
- Dontchev, A.L., see Liao-McPherson, D., TAC Oct. 2020 4288-4294
- Dorfler, F., see Simpson-Porco, J.W., TAC May 2020 2032-2045
- Dos Santos Martins, V., see Terrand-Jeanne, A., TAC Jan. 2020 58-71
- Dower, P.M., see Maass, A.I., TAC July 2020 2992-3006
- Doyle, J.C., see Siami, M., TAC Feb. 2020 733-740
- Dragan, V., see Aberkane, S., TAC March 2020 1288-1294
- Drummond, R., see Turner, M.C., TAC April 2020 1660-1667
- Du, C., Li, F., and Yang, C., An Improved Homogeneous Polynomial Approach for Adaptive Sliding-Mode Control of Markov Jump Systems With Actuator Faults; *TAC March 2020 955-969*
- Du, M., see Meng, D., TAC May 2020 2147-2154
- Duan, K., see Xu, H., TAC Nov. 2020 4793-4799
- Duan, X., George, M., and Bullo, F., Markov Chains With Maximum Return Time Entropy for Robotic Surveillance; *TAC Jan. 2020 72-86*
- Dufour, P., see de Cossio, F.G., TAC Dec. 2020 5205-5219
- Duncan, T.E., see Barreiro-Gomez, J., TAC June 2020 2582-2597
- Duncan, T.E., see Moon, J., TAC Dec. 2020 5422-5428

Е

- Efimov, D., see Wang, J., TAC April 2020 1731-1738
- Efimov, D., see Brogliato, B., TAC Aug. 2020 3707-3713
- Efimov, D., see Zimenko, K., TAC Dec. 2020 5429-5436
- Egorov, A.V., see Ortiz, R., TAC Oct. 2020 4377-4384
- Eichler, A., see Darivianakis, G., TAC March 2020 1044-1056
- Eising, J., see van Waarde, H.J., TAC Nov. 2020 4753-4768
- El Khadir, B., see Ahmadi, A.A., TAC Jan. 2020 325-332
- Elia, N., see Alaviani, S.S., TAC March 2020 986-998
- Erhardsson, T., Saize, S., and Yang, X., Reciprocal Chains: Foundations; TAC Nov. 2020 4840-4845
- Esfahani, P.M., see Kolarijani, A.S., TAC Aug. 2020 3517-3529
- Esfahani, P.M., see Kolarijani, A.S., TAC Aug. 2020 3425-3440
- Esfandiari, K., see Shakarami, M., TAC Oct. 2020 4215-4229

F

- Fagiano, L., see Lauricella, M., TAC Dec. 2020 5189-5204
- Fan, J., see Jiang, Y., TAC Nov. 2020 4965-4972
- Fan, L., see Lopez, V.G., TAC May 2020 1911-1923
- Fang, C., Qi, Y., Chen, J., Tan, R., and Zheng, W.X., Stealthy Actuator Signal Attacks in Stochastic Control Systems: Performance and Limitations; *TAC* Sept. 2020 3927-3934
- Fang, H., see Wei, Y., TAC April 2020 1800-1806
- Fang, H., see He, X., TAC Jan. 2020 28-43
- Fang, Z., Jayawardhana, B., Schaft, A.v.d., and Gao, C., Adaptation Mechanisms in Phosphorylation Cycles By Allosteric Binding and Gene Autoregulation; *TAC Aug. 2020 3457-3470*
- Farhadi, A., see Sanjaroon, V., TAC Aug. 2020 3655-3662
- Farhat, H., Control of Nondeterministic Systems for Bisimulation Equivalence Under Partial Information; *TAC Dec. 2020 5437-5443*
- Farnam, A., and Sarlette, A., Toward a Comprehensive Impossibility Result for String Stability; TAC April 2020 1652-1659
- Farokhi, F., see Murguia, C., TAC Sept. 2020 3950-3957
- Farshi, F.H., see Limebeer, D.J.N., TAC April 2020 1381-1396
- Fei, C., Fei, W., Mao, X., Xia, D., and Yan, L., Stabilization of Highly Nonlinear Hybrid Systems by Feedback Control Based on Discrete-Time State Observations; *TAC July 2020 2899-2912*
- Fei, W., see Fei, C., TAC July 2020 2899-2912
- Fei, Z., Guan, C., and Zhao, X., Event-Triggered Dynamic Output Feedback Control for Switched Systems With Frequent Asynchronism; *TAC July 2020* 3120-3127
- Feiling, J., see Oliveira, T.R., TAC Nov. 2020 4949-4956
- Feng, D., see Sun, T., TAC Jan. 2020 102-114
- Feng, G., see Xu, X., TAC Feb. 2020 809-816
- Feng, G., see Xu, X., TAC Nov. 2020 4509-4524
- Feng, H., Guo, B., and Wu, X., Trajectory Planning Approach to Output Tracking for a 1-D Wave Equation; *TAC May 2020 1841-1854*
- Feng, H., Xu, C., and Yao, P., Observers and Disturbance Rejection Control for a Heat Equation; *TAC Nov. 2020 4957-4964*
- Feng, Q., Nguang, S.K., and Seuret, A., Stability Analysis of Linear Coupled Differential-Difference Systems With General Distributed Delays; *TAC March* 2020 1356-1363
- Feng, Y., Nie, X., and Chen, X., Robust Optimal Filtering Over Lossy Networks; TAC May 2020 2272-2277
- Ferguson, J., Donaire, A., Ortega, R., and Middleton, R.H., Matched Disturbance Rejection for a Class of Nonlinear Systems; *TAC April 2020 1710-1715*
- Fernando, T., see Darouach, M., TAC June 2020 2751-2759
- Ferrante, A., see Ciccone, V., TAC Dec. 2020 5130-5143
- Ferrante, A., Lanzon, A., and Brogliato, B., A Direct Proof of the Equivalence of Side Conditions for Strictly Positive Real Matrix Transfer Functions; *TAC Jan. 2020 450-452*
- Ferrari-Trecate, G., see Gallo, A.J., TAC Sept. 2020 3800-3815
- Ferraro, P., King, C., and Shorten, R., On the Stability of Unverified Transactions in a DAG-Based Distributed Ledger; *TAC Sept. 2020 3772-3783*
- Filo, M., see Bamieh, B., TAC Dec. 2020 5012-5027
- Fioravanti, A.R., see Cardeliquio, C.B., TAC April 2020 1640-1646
- Flad, M., see Molloy, T.L., TAC Feb. 2020 897-904
- Flores, J.V., see Castro, R.d.S., TAC Nov. 2020 4860-4865
- Fokkink, W., see Goorden, M., TAC April 2020 1625-1639
- Fontan, A., Shi, G., Hu, X., and Altafini, C., Interval Consensus for Multiagent Networks; *TAC May 2020 1855-1869*
- Ford, J.J., see Molloy, T.L., TAC Feb. 2020 897-904
- Fortuna, L., see Buscarino, A., TAC Feb. 2020 727-732
- Fortuna, L., see Bucolo, M., TAC Nov. 2020 4989-4994
- Fradkov, A., see Aleksandrov, A., TAC Feb. 2020 794-800
- Fradkov, A.L., see Orlov, Y., TAC April 2020 1484-1498
- Franceschetti, M., see Khojasteh, M.J., TAC March 2020 925-940
- Franco, P.D., Scarciotti, G., and Astolfi, A., A Globally Stable Algorithm for the Integration of High-Index Differential-Algebraic Systems; *TAC May 2020* 2107-2122

- Franzle, M., see Xue, B., TAC April 2020 1468-1483
- Frasca, M., see Buscarino, A., *TAC Feb. 2020 727-732* Frasca, M., see Bucolo, M., *TAC Nov. 2020 4989-4994*
- Frasca, P., see Baldi, S., TAC Jan. 2020 412-418
- Fridman, E., see Sanchez, T., TAC May 2020 2250-2256
- Fridman, E., see Ahmed-Ali, T., TAC May 2020 2200-2206
- Fridman, E., see Xu, J., TAC Dec. 2020 5464-5471
- Fridman, L., see Koch, S., TAC Feb. 2020 757-762
- Fridman, L., see Apaza-Perez, W.A., TAC March 2020 1348-1355
- Fridman, L., see Zhang, C., TAC May 2020 2185-2191
- Fridman, L., see Ghanes, M., TAC Dec. 2020 5407-5414
- Fridman, L., see Xu, J., TAC Dec. 2020 5464-5471
- Fridman, L., see Obeid, H., TAC Nov. 2020 4928-4933
- Fridman, L.M., see Mendoza-Avila, J., TAC July 2020 2814-2825
- Fu, M., see Prashanth, L.A., TAC June 2020 2450-2465
- Fu, R., see Askarzadeh, Z., TAC Feb. 2020 522-533

G

- Gabriel, J., see Deutscher, J., TAC July 2020 3128-3135
- Gagrani, M., see Ouyang, Y., TAC Aug. 2020 3600-3607
- Gahlawat, A., and Valmorbida, G., Stability Analysis of Linear Partial Differential Equations With Generalized Energy Functions; *TAC May 2020 1924-1939*
- Gallo, A.J., Turan, M.S., Boem, F., Parisini, T., and Ferrari-Trecate, G., A Distributed Cyber-Attack Detection Scheme With Application to DC Microgrids; *TAC Sept. 2020 3800-3815*
- Gan, R., Shao, J., Xiao, Y., Zhang, H., and Zheng, W.X., Optimizing Attack Schedules Based on Energy Dispatch Over Two-Hop Relay Networks; *TAC* Sept. 2020 3832-3846
- Gao, C., see Fang, Z., TAC Aug. 2020 3457-3470
- Gao, Q., Dong, D., Petersen, I.R., and Ding, S.X., Design of a Quantum Projection Filter; *TAC Aug. 2020 3693-3700*
- Gao, S., and Caines, P.E., Graphon Control of Large-Scale Networks of Linear Systems; *TAC Oct. 2020 4090-4105*
- Gao, Y., see Wang, X., TAC Feb. 2020 577-590
- Gao, Z., see Yang, Y., TAC April 2020 1413-1428
- Gao, Z., see Chen, X., TAC June 2020 2536-2549
- Garone, E., see Cotorruelo, A., TAC March 2020 1192-1196
- Garone, E., see Hosseinzadeh, M., TAC Jan. 2020 1-11
- Gasparri, A., and Marino, A., A Distributed Framework fork-hop Control Strategies in Large-Scale Networks Based on Local Interactions; *TAC May 2020* 1825-1840
- Gatsis, K., see Tsiamis, A., TAC May 2020 2001-2015
- Ge, X., see Ge, Z., TAC May 2020 2294-2299
- Ge, Z., Ge, X., and Zhang, J., Approximate Controllability and Approximate Observability of Singular Distributed Parameter Systems; *TAC May 2020* 2294-2299
- Gehan, O., see Pouliquen, M., TAC Feb. 2020 786-793
- Geiger, B.C., see Amjad, R.A., TAC July 2020 3068-3075
- Geiselhart, R., see Noroozi, N., TAC March 2020 1203-1210
- George, M., see Duan, X., TAC Jan. 2020 72-86
- Georghiou, A., see Beuchat, P.N., TAC Jan. 2020 143-158
- Georgiou, T.T., see Askarzadeh, Z., TAC Feb. 2020 522-533
- Georgiou, T.T., see Chen, Y., TAC July 2020 2979-2991
- Georgiou, T.T., see Zare, A., TAC Aug. 2020 3441-3456
- Georgiou, T.T., Jabbari, F., and Smith, M.C., Principles of Lossless Adjustable One-Ports; *TAC Jan. 2020 252-262*
- Germani, A., see Cacace, F., TAC Oct. 2020 3961-3976
- Ghaedsharaf, Y., see Somarakis, C., TAC Aug. 2020 3544-3559
- Ghanes, M., Barbot, J., Fridman, L., Levant, A., and Boisliveau, R., A New Varying-Gain-Exponent-Based Differentiator/Observer: An Efficient Balance Between Linear and Sliding-Mode Algorithms; *TAC Dec. 2020 5407-5414*
- Gharesifard, B., see Rezaienia, P., TAC March 2020 1295-1302
- Gharesifard, B., see Touri, B., TAC July 2020 3098-3103

- **Ghodrat, M.,** and Marquez, H., Event-Triggered Design With Guaranteed Minimum Interevent Times and \mathcal{L}_p Performance; *TAC April 2020 1668-1675*
- Ghodrat, M., Mousavi, S.H., de Ruiter, A.H.J., and Marquez, H.J., Dissipativity Properties of Nonlinear Systems Under Network Constraints; *TAC June* 2020 2708-2715
- Ghodrat, M., and Marquez, H.J., On the Event-Triggered Controller Design; *TAC Oct. 2020 4122-4137*
- Ghose, D., see Jain, A., TAC May 2020 2237-2244
- Ghosh, A., see Deshmukh, A., TAC Aug. 2020 3608-3615
- Girard, A., see Li, N., TAC July 2020 3207-3214
- Giri, F., see Ahmed-Ali, T., TAC May 2020 2200-2206
- Giua, A., see Ma, Z., TAC Feb. 2020 493-506
- Giua, A., see Ma, Z., TAC June 2020 2662-2669
- Giua, A., Lafortune, S., and Seatzu, C., Divergence Properties of Labeled Petri Nets and Their Relevance for Diagnosability Analysis; *TAC July 2020 3092-3097*
- Gohrt, T., Osinenko, P., and Streif, S., Converse Optimality for Discrete-Time Systems; *TAC May 2020 2257-2264*
- Golestani, S.J., see Sharifnassab, A., TAC March 2020 1057-1072
- Gomes da Silva, J.M., see Coutinho, D., TAC May 2020 2300-2307
- **Gomez, M.A.,** and Michiels, W., Analysis and Computation of the \mathcal{H}_2 Norm of Delay Differential Algebraic Equations; *TAC May 2020 2192-2199*
- Goncalves, J., see Mauroy, A., TAC June 2020 2550-2565
- Gong, C., see Hou, Y., TAC Aug. 2020 3584-3591
- Goodman, J.R., and Colombo, L.J., On the Existence and Uniqueness of Poincaré Maps for Systems With Impulse Effects; TAC April 2020 1815-1821
- Goorden, M., Mortel-Fronczak, J.v.d., Reniers, M., Fokkink, W., and Rooda, J., Structuring Multilevel Discrete-Event Systems With Dependence Structure Matrices; *TAC April 2020 1625-1639*
- Goudjil, A., see Pouliquen, M., TAC Feb. 2020 786-793
- Grammatico, S., see De Persis, C., TAC May 2020 2171-2176
- Gros, S., and Zanon, M., Data-Driven Economic NMPC Using Reinforcement Learning; TAC Feb. 2020 636-648
- Grundel, S., see Pontes Duff, I., TAC June 2020 2526-2535
- Gu, G., see Zhao, D., TAC March 2020 1160-1175
- Guan, C., see Fei, Z., TAC July 2020 3120-3127
- Gubner, J.A., see Hsieh, C., TAC July 2020 3143-3149
- Guo, B., and Mei, Z., Output Feedback Stabilization for a Class of First-Order Equation Setting of Collocated Well-Posed Linear Systems With Time Delay in Observation; *TAC June 2020 2612-2618*
- Guo, B., see Zhou, H., TAC May 2020 1940-1955
- Guo, B., see Feng, H., TAC May 2020 1841-1854
- Guo, W., and Jin, F., Adaptive Error Feedback Regulator Design for One-Dimensional Heat Equation With Unknown Harmonic Disturbance Anticollocated With Control; *TAC Feb. 2020 824-830*
- Guo, X., see Huo, H., TAC July 2020 3199-3206
- Guo, Z., see Ni, Y., TAC Jan. 2020 419-425
- Gupta, V., see Yan, Y., TAC Aug. 2020 3241-3255
- Gupta, V., see Su, L., TAC Nov. 2020 4902-4907

H

- H. Johansson, K., see Liu, H., TAC Sept. 2020 3895-3902
- Ha, M., see Wang, D., TAC March 2020 1272-1279
- Haddad, W.M., Rajpurohit, T., and Jin, X., Stochastic Semistability for Nonlinear Dynamical Systems With Application to Consensus on Networks With Communication Uncertainty; *TAC July 2020 2826-2841*
- Hadjicostis, C.N., and Dominguez-Garcia, A.D., Privacy-Preserving Distributed Averaging via Homomorphically Encrypted Ratio Consensus; *TAC* Sept. 2020 3887-3894
- Haimovich, H., see Mancilla-Aguilar, J.L., TAC Dec. 2020 5028-5042
- Halder, A., see Askarzadeh, Z., TAC Feb. 2020 522-533
- Halder, A., see Caluya, K.F., TAC Oct. 2020 3991-4004
- Han, Q., see Ding, D., TAC April 2020 1792-1799
- Han, Q., see He, W., TAC Sept. 2020 3879-3886
- Han, Z., see Cao, K., TAC June 2020 2598-2611
- Han, Z., see Chentouf, B., TAC Oct. 2020 4273-4280

- Hao, F., see Yu, H., TAC Nov. 2020 4866-4873
- Haring, M., and Johansen, T.A., On the Stability Bounds of Kalman Filters for Linear Deterministic Discrete-Time Systems; *TAC Oct. 2020 4434-4439* Harmouche, M., see Obeid, H., *TAC Nov. 2020 4928-4933*
- Harvey, R., see Joo, Y., TAC Oct. 2020 4265-4272
- Harvey, K., see 500, 1., me Oct. 2020 4205 4272
- Hashimoto, K., and Dimarogonas, D.V., Synthesizing Communication Plans for Reachability and Safety Specifications; *TAC Feb. 2020 561-576*
- Haskell, W.B., Jain, R., Sharma, H., and Yu, P., A Universal Empirical Dynamic Programming Algorithm for Continuous State MDPs; *TAC Jan. 2020 115-*129
- Hastir, A., Lamoline, F., Winkin, J.J., and Dochain, D., Analysis of the Existence of Equilibrium Profiles in Nonisothermal Axial Dispersion Tubular Reactors; *TAC April 2020 1525-1536*
- Haugh, M.B., and Lacedelli, O.R., Information Relaxation Bounds for Partially Observed Markov Decision Processes; *TAC Aug. 2020 3256-3271*
- He, C., and Huang, J., Leader-Following Consensus for a Class of Multiple Robot Manipulators over Switching Networks by Distributed Position Feedback Control; *TAC Feb. 2020 890-896*
- He, J., see Chen, Z., TAC Sept. 2020 3725-3727
- He, J., see Zhao, C., TAC Oct. 2020 4308-4315
- He, W., Qian, F., Han, Q., and Chen, G., Almost Sure Stability of Nonlinear Systems Under Random and Impulsive Sequential Attacks; *TAC Sept. 2020* 3879-3886
- He, X., Hu, C., Hong, Y., Shi, L., and Fang, H., Distributed Kalman Filters With State Equality Constraints: Time-Based and Event-Triggered Communications; *TAC Jan. 2020 28-43*
- He, X., see Zhong, M., TAC Oct. 2020 4464-4471
- Heath, W.P., see Carrasco, J., TAC Nov. 2020 4538-4553
- Heemels, W.P.M.H., see Wang, W., TAC Feb. 2020 620-635
- Herisse, B., see Bonalli, R., TAC June 2020 2418-2433
- Hetel, L., see Sanchez, T., TAC May 2020 2250-2256
- Hill, D.J., see Zhu, L., TAC Dec. 2020 5070-5082
- Hirche, S., see Umlauft, J., TAC Oct. 2020 4154-4169
- Hjalmarsson, H., see Risuleo, R.S., TAC July 2020 2801-2813
- Ho, D.W.C., see Li, W., TAC June 2020 2654-2661
- Hohmann, S., see Molloy, T.L., TAC Feb. 2020 897-904
- Hong, Y., see Chen, G., TAC Aug. 2020 3409-3424
- Hong, Y., see He, X., TAC Jan. 2020 28-43
- Horn, B.K.P., see Wang, L., TAC July 2020 3076-3083
- Horn, B.K.P., see Wang, L., TAC Aug. 2020 3397-3408
- Horn, M., see Koch, S., TAC Feb. 2020 757-762
- Hosseinzadeh, M., and Garone, E., An Explicit Reference Governor for the Intersection of Concave Constraints; *TAC Jan. 2020 1-11*
- Hou, Y., Wang, W., Zang, Y., Lin, F., Yu, M., and Gong, C., Relative Network Observability and Its Relation With Network Observability; *TAC Aug. 2020* 3584-3591
- Hovakimyan, N., see Wan, N., TAC April 2020 1697-1703
- Hovakimyan, N., see Mao, Y., TAC Sept. 2020 3847-3862
- Hsieh, C., Barmish, B.R., and Gubner, J.A., On Positive Solutions of a Delay Equation Arising When Trading in Financial Markets; *TAC July 2020 3143-3149*
- Hu, C., see He, X., TAC Jan. 2020 28-43
- Hu, G., see Pang, Y., TAC Jan. 2020 333-340
- Hu, H., see Jiang, X., TAC Dec. 2020 5399-5406
- Hu, H., see Chen, C., TAC Dec. 2020 5236-5247
- Hu, J., see Zou, L., TAC Dec. 2020 5368-5375
- Hu, L., and Andradottir, S., Constrained Search via Penalization for Continuous Simulation Optimization; *TAC Nov. 2020 4741-4752*
- Hu, Q., see Wang, C., TAC Feb. 2020 763-770
- Hu, X., see Fontan, A., TAC May 2020 1855-1869
- Hu, X., and Welsh, J.S., Continuous-Time Model Identification From Filtered Sampled Data: Error Analysis; *TAC Oct. 2020 4005-4015*
- Hu, Y., Ma, Z., and Li, Z., Design of Supervisors for Active Diagnosis in Discrete Event Systems; *TAC Dec. 2020 5159-5172*
- Hua, C., see You, X., TAC Dec. 2020 5510-5516

- Huang, B., Zou, Y., Meng, Z., and Ren, W., Distributed Time-Varying Convex Optimization for a Class of Nonlinear Multiagent Systems; *TAC Feb. 2020* 801-808
- Huang, J., see He, C., TAC Feb. 2020 890-896

Huang, J., see Liu, W., TAC July 2020 3215-3222

- Huang, J., Wang, W., Wen, C., and Li, G., Adaptive Event-Triggered Control of Nonlinear Systems With Controller and Parameter Estimator Triggering; *TAC Jan. 2020 318-324*
- Huang, M., and Zhou, M., Linear Quadratic Mean Field Games: Asymptotic Solvability and Relation to the Fixed Point Approach; *TAC April 2020 1397-1412*
- Huber, O., Acary, V., and Brogliato, B., Lyapunov Stability Analysis of the Implicit Discrete-Time Twisting Control Algorithm; *TAC June 2020 2619-2626*
- Hughes, T.H., Minimal Series–Parallel Network Realizations of Bicubic Impedances; TAC Dec. 2020 4997-5011
- Huo, H., and Guo, X., Risk Probability Minimization Problems for Continuous-Time Markov Decision Processes on Finite Horizon; *TAC July 2020* 3199-3206
- Hwang, I., see Nandiganahalli, J.S., TAC Feb. 2020 695-710

I

- Ichalal, D., and Mammar, S., On Unknown Input Observers of Linear Systems: Asymptotic Unknown Input Decoupling Approach; *TAC March 2020 1197-1202*
- Imura, J., see Urata, K., TAC March 2020 1325-1332
- Inga, J., see Molloy, T.L., TAC Feb. 2020 897-904
- Inoue, M., see Urata, K., TAC March 2020 1325-1332
- Invernizzi, D., Lovera, M., and Zaccarian, L., Dynamic Attitude Planning for Trajectory Tracking in Thrust-Vectoring UAVs; *TAC Jan. 2020 453-460*
- Ionescu, T.C., see Necoara, I., TAC Dec. 2020 5328-5335

Ishii, H., see Wakaiki, M., TAC Aug. 2020 3560-3575

- Ishizaki, T., see Urata, K., TAC March 2020 1325-1332
- Isidori, A., see Wu, Y., TAC April 2020 1365-1380
- Israel, A., see Ornik, M., TAC Nov. 2020 4800-4807
- Israel, A., see Ahmadi, M., TAC Nov. 2020 4934-4940
- Ito, H., A Complete Characterization of Integral Input-to-State Stability and Its Small-Gain Theorem for Stochastic Systems; *TAC July 2020 3039-3052* Iwasaki, T., see Zhao, J., *TAC Jan. 2020 87-101*

J

- Jabbari, F., see Georgiou, T.T., TAC Jan. 2020 252-262
- Jafarnejadsani, H., see Mao, Y., TAC Sept. 2020 3847-3862
- Jain, A., and Ghose, D., Trajectory-Constrained Collective Circular Motion With Different Phase Arrangements; *TAC May 2020 2237-2244*
- Jain, R., see Ouyang, Y., TAC Aug. 2020 3600-3607
- Jain, R., see Haskell, W.B., TAC Jan. 2020 115-129
- Jakovetic, D., see Jerinkic, N.K., TAC Feb. 2020 846-853
- Jayawardhana, B., see Fang, Z., TAC Aug. 2020 3457-3470
- Jerinkic, N.K., Jakovetic, D., Krejic, N., and Bajovic, D., Distributed Second-Order Methods With Increasing Number of Working Nodes; *TAC Feb.* 2020 846-853
- Ji, Y., see Mohajerani, S., TAC Aug. 2020 3349-3364
- Jia, J., Trentelman, H.L., Baar, W., and Camlibel, M.K., Strong Structural Controllability of Systems on Colored Graphs; *TAC Oct. 2020 3977-3990* Jia, Y., and Yan, Y., *TAC Day, 2020 5510, 5516*
- Jia, X., see You, X., TAC Dec. 2020 5510-5516
- Jiang, X., Chen, S., Yang, J., Hu, H., and Zhang, Z., Finding the Equilibrium for Continuous Constrained Markov Games Under the Average Criteria; *TAC Dec. 2020 5399-5406*
- Jiang, Y., Shi, D., Fan, J., Chai, T., and Chen, T., Set-Valued Feedback Control and Its Application to Event-Triggered Sampled-Data Systems; *TAC Nov.* 2020 4965-4972
- Jiao, J., Trentelman, H.L., and Camlibel, M.K., A Suboptimality Approach to Distributed Linear Quadratic Optimal Control; *TAC March 2020 1218-1225*

- Jimenez-Rodriguez, E., Munoz-Vazquez, A.J., Sanchez-Torres, J.D., Defoort, M., and Loukianov, A.G., A Lyapunov-Like Characterization of Predefined-Time Stability; *TAC Nov. 2020 4922-4927*
- Jin, F., see Guo, W., TAC Feb. 2020 824-830
- Jin, X., see Haddad, W.M., TAC July 2020 2826-2841
- Jing, G., and Wang, L., Multiagent Flocking With Angle-Based Formation Shape Control; *TAC Feb. 2020 817-823*
- Jing, G., see Lu, K., TAC Jan. 2020 426-433
- Jing, X., see Liu, M., TAC Oct. 2020 4362-4368
- Johansen, T.A., see Haring, M., TAC Oct. 2020 4434-4439
- Johansson, K.H., see Zhang, K., TAC Dec. 2020 5144-5158
- Johansson, K.H., see Ren, X., TAC Sept. 2020 3742-3757
- Johansson, K.H., see Milosevic, J., TAC Sept. 2020 3816-3831
- Jokic, A., and Nakic, I., On Structured Lyapunov Functions and Dissipativity in Interconnected LTI Systems; *TAC March 2020 970-985*
- Joo, Y., Harvey, R., and Qu, Z., Preserving and Achieving Passivity-Short Property Through Discretization; *TAC Oct. 2020 4265-4272*
- Joshi, A., Moothedath, S., and Chaporkar, P., Minimum Cost Feedback Selection in Structured Systems: Hardness and Approximation Algorithm; *TAC Dec. 2020 5517-5524*
- Jovanovic, M.R., see Zare, A., TAC Aug. 2020 3441-3456
- Jozsa, M., Petreczky, M., and Camlibel, M.K., Causality and Network Graph in General Bilinear State-Space Representations; *TAC Aug. 2020 3623-3630*
- Julvez, J., and Oliver, S.G., Steady State Analysis of Flexible Nets; *TAC June* 2020 2510-2525

K

- Kahelras, M., see Ahmed-Ali, T., TAC May 2020 2200-2206
- Kanakis, G.S., and Rovithakis, G.A., Guaranteeing Global Asymptotic Stability and Prescribed Transient and Steady-State Attributes via Uniting Control; *TAC May 2020 1956-1968*
- Kanellopoulos, A., and Vamvoudakis, K.G., A Moving Target Defense Control Framework for Cyber-Physical Systems; *TAC March 2020 1029-1043*
- Karabacak, O., Kivilcim, A., and Wisniewski, R., Almost Global Stability of Nonlinear Switched Systems With Time-Dependent Switching; *TAC July* 2020 2969-2978
- Karabag, M.O., see Savas, Y., TAC April 2020 1552-1567
- Karafyllis, I., Kontorinaki, M., and Krstic, M., Adaptive Control by Regulation-Triggered Batch Least Squares; *TAC July 2020 2842-2855*
- Karaman, S., see Miculescu, D., TAC Feb. 2020 680-694
- Karimi, H.R., see Cheng, J., TAC Nov. 2020 4816-4823
- Karimi, H.R., see Qi, W., TAC Jan. 2020 361-368
- Karimi, H.R., see Zhang, J., TAC Jan. 2020 287-294
- Katewa, V., see Anguluri, R., TAC Sept. 2020 3903-3910
- Kawan, C., and Yuksel, S., Metric and Topological Entropy Bounds for Optimal Coding of Stochastic Dynamical Systems; *TAC June 2020 2466-2479*
- Kawano, Y., Besselink, B., Scherpen, J.M.A., and Cao, M., Data-Driven Model Reduction of Monotone Systems by Nonlinear DC Gains; *TAC May 2020* 2094-2106
- Kawano, Y., Besselink, B., and Cao, M., Contraction Analysis of Monotone Systems via Separable Functions; *TAC Aug. 2020 3486-3501*
- Kawano, Y., and Cao, M., Design of Privacy-Preserving Dynamic Controllers; TAC Sept. 2020 3863-3878
- Kebriaei, H., see Shokri, M., TAC Dec. 2020 5496-5502
- Kellett, C.M., see Wang, L., TAC June 2020 2670-2677
- Kerschbaum, S., and Deutscher, J., Backstepping Control of Coupled Linear Parabolic PDEs With Space and Time Dependent Coefficients; *TAC July* 2020 3060-3067
- Kerschbaum, S., see Deutscher, J., TAC May 2020 2207-2214
- Keviczky, T., see Kolarijani, A.S., TAC Aug. 2020 3517-3529
- Keviczky, T., see Kolarijani, A.S., TAC Aug. 2020 3425-3440
- Khalaj, B.H., see Sanjaroon, V., TAC Aug. 2020 3655-3662
- Khalil, H.K., see Wu, Y., TAC April 2020 1365-1380
- Khammash, M., see Siami, M., TAC Feb. 2020 733-740

- Khan, G.D., Chen, Z., and Zhu, L., A New Approach for Event-Triggered Stabilization and Output Regulation of Nonlinear Systems; *TAC Aug. 2020 3592-3599*
- Khan, U.A., see Xin, R., TAC June 2020 2627-2633
- Khan, U.A., see Saadatniaki, F., TAC Nov. 2020 4769-4780
- Khojasteh, M.J., Tallapragada, P., Cortes, J., and Franceschetti, M., The Value of Timing Information in Event-Triggered Control; *TAC March 2020 925-940*
- Kia, S.S., see Moradian, H., TAC Nov. 2020 4832-4839
- Kim, H., Zhu, M., and Lian, J., Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads; *TAC Nov. 2020 4887-4894*
- Kim, J., see Lee, J.G., TAC Sept. 2020 3935-3942
- Kim, T., Lee, C., and Shim, H., Completely Decentralized Design of Distributed Observer for Linear Systems; *TAC Nov. 2020 4664-4678*
- King, C., see Ferraro, P., TAC Sept. 2020 3772-3783
- Kishida, M., see Ogura, M., TAC Nov. 2020 4648-4663
- Kivilcim, A., see Karabacak, O., TAC July 2020 2969-2978
- Koch, S., Reichhartinger, M., Horn, M., and Fridman, L., Discrete-Time Implementation of Homogeneous Differentiators; *TAC Feb. 2020 757-762*
- Koga, S., see Oliveira, T.R., TAC Nov. 2020 4949-4956
- Kohler, J., Muller, M.A., and Allgower, F., A Nonlinear Model Predictive Control Framework Using Reference Generic Terminal Ingredients; *TAC Aug.* 2020 3576-3583
- Kolarijani, A.S., Bregman, S.C., Esfahani, P.M., and Keviczky, T., A Decentralized Event-Based Approach for Robust Model Predictive Control; *TAC* Aug. 2020 3517-3529
- Kolarijani, A.S., Esfahani, P.M., and Keviczky, T., Continuous-Time Accelerated Methods via a Hybrid Control Lens; *TAC Aug. 2020 3425-3440*
- Kolmanovsky, I.V., see Li, N., TAC July 2020 3207-3214 Kolmanovsky, I.V., see Nicotra, M.M., TAC Aug. 2020 3677-3684
- Kolmanovsky, I.V., see Theorda, M.M., TAC Aug. 2020 3077-3007 Kolmanovsky, I.V., see Liao-McPherson, D., TAC Oct. 2020 4288-4294
- Komaee, A., Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators; *TAC May 2020 1969-1984*
- Kontorinaki, M., see Karafyllis, I., TAC July 2020 2842-2855
- Kooshkbaghi, M., and Marquez, H.J., Event-Triggered Discrete-Time Cubature Kalman Filter for Nonlinear Dynamical Systems With Packet Dropout; TAC May 2020 2278-2285
- Korda, M., and Mezic, I., Optimal Construction of Koopman Eigenfunctions for Prediction and Control; *TAC Dec. 2020 5114-5129*
- Kotta, U., see Carravetta, F., TAC Feb. 2020 867-873
- Krejic, N., see Jerinkic, N.K., TAC Feb. 2020 846-853
- Krstic, M., see Ni, Y., TAC April 2020 1716-1723
- Krstic, M., see Karafyllis, I., TAC July 2020 2842-2855
- Krstic, M., see Zhu, Y., TAC Dec. 2020 5344-5351
- Krstic, M., see Oliveira, T.R., TAC Nov. 2020 4949-4956
- Kucera, V., Stability-Preserving Morse Normal Form; TAC Dec. 2020 5099-5113
- Kulikov, G.Y., see Kulikova, M.V., TAC Oct. 2020 4472-4479
- Kulikova, M.V., Chandrasekhar-Based Maximum Correntropy Kalman Filtering With the Adaptive Kernel Size Selection; *TAC Feb. 2020 741-748*
- Kulikova, M.V., Tsyganova, J.V., and Kulikov, G.Y., UD-Based Pairwise and MIMO Kalman-Like Filtering for Estimation of Econometric Model Structures; *TAC Oct. 2020 4472-4479*
- Kulkarni, A.A., Near Optimality of Linear Strategies for Static Teams With "Big" Non-Gaussian Noise; *TAC Feb. 2020 534-545*
- Kumar, V., see Panagou, D., TAC Aug. 2020 3365-3380
- Kung, E., Wang, J., Wu, J., Shi, D., and Shi, L., On the Nonexistence of Event Triggers That Preserve Gaussian State in Presence of Packet-Drop; *TAC Oct.* 2020 4302-4307
- Kurula, M., Well-Posedness of Time-Varying Linear Systems; TAC Oct. 2020 4075-4089
- Kwon, C., see Nandiganahalli, J.S., TAC Feb. 2020 695-710

L

Lacedelli, O.R., see Haugh, M.B., *TAC Aug. 2020 3256-3271* Lafortune, S., see Mohajerani, S., *TAC April 2020 1739-1746*

- Lafortune, S., see Giua, A., TAC July 2020 3092-3097
- Lafortune, S., see Mohajerani, S., TAC Aug. 2020 3349-3364
- Laghrouche, S., see Obeid, H., TAC Nov. 2020 4928-4933
- Lam, J., see Liu, J.J.R., TAC June 2020 2724-2729
- Lam, J., see Ogura, M., TAC Nov. 2020 4648-4663
- Lam, J., see Liu, M., TAC Oct. 2020 4362-4368
- Lamnabhi-Lagarrigue, F., see Ahmed-Ali, T., TAC May 2020 2200-2206
- Lamoline, F., see Hastir, A., TAC April 2020 1525-1536
- Lamoline, F., and Winkin, J.J., Well-Posedness of Boundary Controlled and Observed Stochastic Port-Hamiltonian Systems; *TAC Oct. 2020 4258-4264*
- Lanzon, A., see Ferrante, A., TAC Jan. 2020 450-452 Lau, V.K.N., see Cai, S., TAC May 2020 2046-2061
- Lauricella, M., and Fagiano, L., Set Membership Identification of Linear Sys-
- tems With Guaranteed Simulation Accuracy; *TAC Dec. 2020 5189-5204*
- Lavaei, A., Soudjani, S., and Zamani, M., Compositional (In)Finite Abstractions for Large-Scale Interconnected Stochastic Systems; *TAC Dec. 2020* 5280-5295
- Le Gorrec, Y., see Macchelli, A., TAC Oct. 2020 4440-4447
- Le Ny, J., see Salhab, R., TAC Aug. 2020 3302-3316
- Lee, C., see Kim, T., TAC Nov. 2020 4664-4678
- Lee, J.G., Kim, J., and Shim, H., Fully Distributed Resilient State Estimation Based on Distributed Median Solver; *TAC Sept. 2020 3935-3942*
- Lee, T., Tan, Y., and Mareels, I., Detectability and Uniform Global Asymptotic Stability in Switched Nonlinear Time-Varying Systems; *TAC May 2020* 2123-2138
- Lee, W., see Moothedath, S., TAC Dec. 2020 5248-5263
- Lei, J., and Chen, H., Distributed Stochastic Approximation Algorithm With Expanding Truncations; *TAC Feb. 2020 664-679*
- Leifeld, T., see Zhang, Z., TAC Jan. 2020 434-441
- Leong, I., see Wang, X., TAC Feb. 2020 577-590
- Levant, A., see Ghanes, M., TAC Dec. 2020 5407-5414
- Lewis, F.L., see Zuo, S., TAC July 2020 3104-3111
- Lewis, F.L., see Lopez, V.G., TAC May 2020 1911-1923
- Lewis, F.L., see Chen, G., TAC Nov. 2020 4914-4921
- Lhachemi, H., Saussie, D., Zhu, G., and Shorten, R., Input-to-State Stability of a Clamped-Free Damped String in the Presence of Distributed and Boundary Disturbances; *TAC March 2020 1248-1255*
- Li, C., see Chen, L., TAC Nov. 2020 4941-4948
- Li, D., see Wan, N., TAC April 2020 1697-1703
- Li, D., see Zhang, Y., TAC Oct. 2020 4424-4429
- Li, F., see Du, C., TAC March 2020 955-969
- Li, F., Li, X., Zhang, X., and Yang, C., Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach; TAC May 2020 2163-2170
- Li, F., Xu, S., Shen, H., and Ma, Q., Passivity-Based Control for Hidden Markov Jump Systems With Singular Perturbations and Partially Unknown Probabilities; *TAC Aug. 2020 3701-3706*
- Li, F., and Liu, Y., Event-Triggered Stabilization for Continuous-Time Stochastic Systems; TAC Oct. 2020 4031-4046
- Li, G., and Xie, X., Adaptive State-Feedback Stabilization of Stochastic High-Order Nonlinear Systems With Time-Varying Powers and Stochastic Inverse Dynamics; *TAC Dec. 2020 5360-5367*
- Li, G., see Huang, J., TAC Jan. 2020 318-324
- Li, H., see Liu, C., TAC Feb. 2020 778-785
- Li, H., see Liu, C., TAC Jan. 2020 302-309
- Li, H., Xu, X., and Zhao, Y., Efficient Simulation Budget Allocation With Bound Information; *TAC Jan. 2020 207-222*
- Li, J., see Zhang, G., TAC July 2020 3157-3163
- Li, J., see Zhang, W., TAC Nov. 2020 4895-4901
- Li, K., see Zhang, J., TAC July 2020 2856-2866
- Li, K., see You, X., TAC Dec. 2020 5510-5516
- Li, L., and Shamma, J.S., Efficient Strategy Computation in Zero-Sum Asymmetric Information Repeated Games; *TAC July 2020 2785-2800*
- Li, L., Basile, F., and Li, Z., An Approach to Improve Permissiveness of Supervisors for GMECs in Time Petri Net Systems; *TAC Jan. 2020 237-251*
- Li, M., see Chen, H., TAC Dec. 2020 5480-5487
- Li, N., see Qu, G., TAC June 2020 2566-2581

- Li, N., Kolmanovsky, I.V., and Girard, A., A Reference Governor for Nonlinear Systems With Disturbance Inputs Based on Logarithmic Norms and Quadratic Programming; *TAC July 2020 3207-3214*
- Li, P., Boem, F., Pin, G., and Parisini, T., Kernel-Based Simultaneous Parameter-State Estimation for Continuous-Time Systems; *TAC July 2020 3053-3059*
- Li, P., see Yang, H., TAC Dec. 2020 5376-5383
- Li, S., see Yin, X., TAC April 2020 1429-1441
- Li, S., see Yang, J., TAC May 2020 2230-2236
- Li, S., see Zhang, C., TAC May 2020 2185-2191
- Li, S., see Wang, X., TAC Dec. 2020 5296-5311
- Li, T., see Yang, J., TAC May 2020 2230-2236
- Li, W., Wang, Z., Ho, D.W.C., and Wei, G., On Boundedness of Error Covariances for Kalman Consensus Filtering Problems; *TAC June 2020 2654-2661*
- Li, X., see Ni, Y., *TAC April 2020 1716-1723*
- Li, X., see Cao, K., *TAC June 2020 2598-2611* Li, X., see Li, F., *TAC May 2020 2163-2170*
- Li, X., Peng, D., and Cao, J., Lyapunov Stability for Impulsive Systems via Event-Triggered Impulsive Control; TAC Nov. 2020 4908-4913
- Li, X.R., see Rezaie, R., TAC May 2020 2286-2293
- Li, Z., see Ma, Z., TAC Feb. 2020 493-506
- Li, Z., Wu, Z., and Ding, Z., Distributed Optimal Coordination for Heterogeneous Linear Multiagent Systems With Event-Triggered Mechanisms; *TAC April 2020 1763-1770*
- Li, Z., see Li, Z., TAC April 2020 1763-1770
- Li, Z., see Ma, Z., TAC June 2020 2662-2669
- Li, Z., see Hu, Y., TAC Dec. 2020 5159-5172
- Li, Z., see Li, L., TAC Jan. 2020 237-251
- Lian, J., see Kim, H., TAC Nov. 2020 4887-4894
- Lian, J., and Wu, F., Stabilization of Switched Linear Systems Subject to Actuator Saturation via Invariant Semiellipsoids; *TAC Oct. 2020* 4332-4339
- Liang, J., see Chen, H., TAC Dec. 2020 5480-5487
- Liang, S., Wang, L.Y., and Yin, G., Dual Averaging Push for Distributed Convex Optimization Over Time-Varying Directed Graph; *TAC April 2020 1785-1791*
- Liang, S., Wang, L.Y., and Yin, G., Distributed Smooth Convex Optimization With Coupled Constraints; *TAC Jan. 2020 347-353*
- Liao, Y., Shen, X., and Rao, H., Analytic Sensor Rules for Optimal Distributed Decision Given K-Out-of-L Fusion Rule Under Monte Carlo Approximation; *TAC Dec. 2020 5488-5495*
- Liao-McPherson, D., see Nicotra, M.M., TAC Aug. 2020 3677-3684
- Liao-McPherson, D., Nicotra, M.M., Dontchev, A.L., Kolmanovsky, I.V., and Veliov, V.M., Sensitivity-Based Warmstarting for Nonlinear Model Predictive Control With Polyhedral State and Control Constraints; *TAC Oct. 2020* 4288-4294
- Lim, C., see Zhang, B., TAC March 2020 1318-1324
- Limebeer, D.J.N., Ober-Blobaum, S., and Farshi, F.H., Variational Integrators for Dissipative Systems; *TAC April 2020 1381-1396*
- Limon, D., see Cotorruelo, A., TAC March 2020 1192-1196
- Lin, F., see Hou, Y., TAC Aug. 2020 3584-3591
- Lin, H., see Liu, M., TAC Oct. 2020 4362-4368
- Lin, H.X., see Xi, K., TAC July 2020 2913-2928
- Lin, W., and Zhang, X., A Dynamic Feedback Framework for Control of Time-Delay Nonlinear Systems With Unstable Zero Dynamics; *TAC Aug.* 2020 3317-3332
- Lin, W., When Is a Nonlinear System Semiglobally Asymptotically Stabilizable by Digital Feedback?; *TAC Nov. 2020 4584-4599*
- Linder, T., see Rezaienia, P., TAC March 2020 1295-1302
- Linder, T., see Saldi, N., TAC Jan. 2020 130-142
- Ling, Q., Necessary and Sufficient Bit Rate Conditions to Stabilize a Scalar Continuous-Time LTI System Based on Event Triggering; *TAC April 2020* 1598-1612
- Ling, Q., see Zhang, J., TAC July 2020 2856-2866
- Liu, C., Li, H., Shi, Y., and Xu, D., Distributed Event-Triggered Gradient Method for Constrained Convex Minimization; *TAC Feb. 2020* 778-785
- Liu, C., see Yang, J., TAC May 2020 2230-2236
- Liu, C., Li, H., Shi, Y., and Xu, D., Codesign of Event Trigger and Feedback Policy in Robust Model Predictive Control; *TAC Jan. 2020 302-309*

- Liu, H., Mo, Y., Yan, J., Xie, L., H. Johansson, K., An Online Approach to Physical Watermark Design; *TAC Sept. 2020 3895-3902*
- Liu, J., see Ye, M., TAC Nov. 2020 4679-4694
- Liu, J., see Zibaeenejad, M.H., TAC Oct. 2020 4281-4287
- Liu, J.J.R., Lam, J., and Shu, Z., Positivity-Preserving Consensus of Homogeneous Multiagent Systems; *TAC June 2020 2724-2729*
- Liu, K., see Shao, G., TAC July 2020 3184-3190
- Liu, K.J.R., see Cao, X., TAC May 2020 2215-2222
- Liu, L., see Lu, M., TAC Feb. 2020 839-845
- Liu, L., see Xu, X., TAC Feb. 2020 809-816
- Liu, L., and Deng, F., Mean-Square Exponential Stability for Stochastic Control Systems With Discrete-Time State Feedbacks and Their Numerical Schemes in Simulation; *TAC Dec. 2020 5384-5391*
- Liu, L., see Xu, X., TAC Nov. 2020 4509-4524
- Liu, M., Lam, J., Lin, H., and Jing, X., Necessary and Sufficient Conditions on Negative Imaginariness for Interval SISO Transfer Functions and Their Interconnection; *TAC Oct. 2020 4362-4368*
- Liu, S., Wang, Z., Chen, Y., and Wei, G., Protocol-Based Unscented Kalman Filtering in the Presence of Stochastic Uncertainties; *TAC March 2020 1303-1309*
- Liu, W., and Huang, J., Leader-Following Consensus for Linear Multiagent Systems via Asynchronous Sampled-Data Control; TAC July 2020 3215-3222
- Liu, W., see Sun, H., TAC Aug. 2020 3631-3638
- Liu, W., Feedforward Boundary Control for the Regulation of a Passive and Diffusive Scalar in Two-Dimensional Unsteady Flows; *TAC Nov. 2020 4882-4886*
- Liu, X., and Zhang, K., Input-to-State Stability of Time-Delay Systems With Delay-Dependent Impulses; *TAC April 2020 1676-1682*
- Liu, X., and Zhong, S., Asymptotic Stability Analysis of Discrete-Time Switched Cascade Nonlinear Systems With Delays; *TAC June 2020 2686-2692*
- Liu, X., see Wang, J., TAC July 2020 3136-3142
- Liu, Y., see Zhu, S., TAC April 2020 1779-1784
- Liu, Y., see Li, F., TAC Oct. 2020 4031-4046
- Liu, Y., see Chen, J., TAC Oct. 2020 4385-4392
- Liu, Z., see Wang, L., TAC Oct. 2020 4340-4347
- Ljung, L., see Zhang, Q., TAC Aug. 2020 3671-3676
- Ljung, L., see Yu, C., TAC Oct. 2020 4201-4214
- Lopez, V.G., Lewis, F.L., Wan, Y., Sanchez, E.N., and Fan, L., Solutions for Multiagent Pursuit-Evasion Games on Communication Graphs: Finite-Time Capture and Asymptotic Behaviors; *TAC May 2020 1911-1923*
- Lopez-Araujo, D.J., see Zamora-Gomez, G.I., TAC Feb. 2020 882-889
- Loria, A., see Maghenem, M.A., TAC Aug. 2020 3639-3646
- Loukianov, A.G., see Jimenez-Rodriguez, E., TAC Nov. 2020 4922-4927
- Lovera, M., see Invernizzi, D., TAC Jan. 2020 453-460
- Lu, A., and Yang, G., Secure State Estimation for Multiagent Systems With Faulty and Malicious Agents; *TAC Aug. 2020 3471-3485*
- Lu, A., and Yang, G., Malicious Attacks on State Estimation Against Distributed Control Systems; *TAC Sept. 2020 3911-3918*
- Lu, J., see Zhu, S., TAC April 2020 1779-1784
- Lu, K., Jing, G., and Wang, L., Online Distributed Optimization With Strongly Pseudoconvex-Sum Cost Functions; *TAC Jan. 2020 426-433*
- Lu, M., and Liu, L., Leader-Following Attitude Consensus of Multiple Rigid Spacecraft Systems Under Switching Networks; TAC Feb. 2020 839-845
- Lu, R., see Wu, Y., TAC April 2020 1365-1380
- Luo, J., Wu, W., Zhou, M., Shao, H., Nonami, K., and Su, H., Structural Controller for Logical Expression of Linear Constraints on Petri Nets; *TAC Jan.* 2020 397-403
- Luo, S., and Deng, F., Necessary and Sufficient Conditions for 2pth Moment Stability of Several Classes of Linear Stochastic Systems; *TAC July 2020* 3084-3091
- Luo, S., and Deng, F., On Event-Triggered Control of Nonlinear Stochastic Systems; TAC Jan. 2020 369-375
- Luo, X., see Wang, Z., TAC April 2020 1613-1624
- Lygeros, J., see Darivianakis, G., TAC March 2020 1044-1056
- Lygeros, J., see Beuchat, P.N., TAC Jan. 2020 143-158
- Lyu, S., see Wang, H., TAC June 2020 2760-2767

М

- Ma, G., see Chen, L., TAC Nov. 2020 4941-4948
- Ma, Q., see Li, F., TAC Aug. 2020 3701-3706
- Ma, Q., see Qin, J., TAC Dec. 2020 5083-5098
- Ma, Z., Li, Z., and Giua, A., Marking Estimation in a Class of Time Labeled Petri Nets; *TAC Feb. 2020 493-506*
- Ma, Z., Zhu, G., Li, Z., and Giua, A., Computation of Admissible Marking Sets in Weighted Synchronization-Free Petri Nets by Dynamic Programming; *TAC June 2020 2662-2669*
- Ma, Z., see Hu, Y., TAC Dec. 2020 5159-5172
- Maass, A.I., Nesic, D., Postoyan, R., and Dower, P.M., Observer Design for Nonlinear Networked Control Systems With Persistently Exciting Protocols; *TAC July 2020 2992-3006*
- Macchelli, A., Le Gorrec, Y., and Ramirez, H., Exponential Stabilization of Port-Hamiltonian Boundary Control Systems via Energy Shaping; *TAC Oct.* 2020 4440-4447
- Machado, J.E., see Matveev, A.S., TAC Nov. 2020 4726-4740
- Maghenem, M.A., Loria, A., and Panteley, E., Cascades-Based Leader–Follower Formation Tracking and Stabilization of Multiple Nonholonomic Vehicles; *TAC Aug. 2020 3639-3646*
- Mahajan, A., see Chakravorty, J., TAC May 2020 2016-2031
- Mahajan, A., see Afshari, M., TAC Aug. 2020 3616-3622
- Mahajan, A., see Subramanian, J., TAC Aug. 2020 3663-3670
- Maity, D., and Baras, J.S., Optimal Event-Triggered Control of Nondeterministic Linear Systems; TAC Feb. 2020 604-619
- Malhame, R.P., see Salhab, R., TAC Aug. 2020 3302-3316
- Malisoff, M., see Mazenc, F., TAC April 2020 1704-1709
- Mallada, E., see Paganini, F., TAC July 2020 3007-3022
- Mammar, S., see Ichalal, D., *TAC March 2020 1197-1202*
- Mancilla-Aguilar, J.L., and Haimovich, H., Uniform Input-To-State Stability for Switched and Time-Varying Impulsive Systems; *TAC Dec. 2020 5028-5042*
- Mandic, D.P., see Talebi, S.P., TAC Oct. 2020 4246-4257
- Mansoori, F., and Wei, E., A Fast Distributed Asynchronous Newton-Based Optimization Algorithm; *TAC July 2020 2769-2784*
- Mao, X., see Fei, C., TAC July 2020 2899-2912
- Mao, Y., Jafarnejadsani, H., Zhao, P., Akyol, E., and Hovakimyan, N., Novel Stealthy Attack and Defense Strategies for Networked Control Systems; *TAC Sept. 2020 3847-3862*
- Marconi, L., see Bin, M., TAC Oct. 2020 4369-4376
- Marcus, S.I., see Ramasubramanian, B., TAC April 2020 1442-1455
- Marcus, S.I., see Prashanth, L.A., TAC June 2020 2450-2465
- Marden, J.R., see Paccagnan, D., TAC Nov. 2020 4616-4631
- Mareels, I., see Lee, T., TAC May 2020 2123-2138
- Margaliot, M., see Ben Avraham, T., TAC March 2020 941-954
- Marino, A., see Gasparri, A., TAC May 2020 1825-1840
- Marquez, H., see Ghodrat, M., TAC April 2020 1668-1675
- Marquez, H.J., see Ghodrat, M., TAC June 2020 2708-2715
- Marquez, H.J., see Kooshkbaghi, M., TAC May 2020 2278-2285
- Marquez, H.J., see Ghodrat, M., TAC Oct. 2020 4122-4137
- Marquez, R., see Angulo, S., TAC July 2020 3164-3169
- Martins, V.D.S., see Terrand-Jeanne, A., TAC Nov. 2020 4481-4492
- Marx, S., Chitour, Y., and Prieur, C., Stability Analysis of Dissipative Systems Subject to Nonlinear Damping via Lyapunov Techniques; *TAC May 2020* 2139-2146
- Masopust, T., see Reveliotis, S., TAC July 2020 2883-2898
- Masopust, T., Critical Observability for Automata and Petri Nets; *TAC Jan.* 2020 341-346
- Materassi, D., see Sepehr, F., TAC March 2020 1014-1028
- Materassi, D., and Salapaka, M.V., Signal Selection for Estimation and Identification in Networks of Dynamic Systems: A Graphical Model Approach; *TAC Oct. 2020 4138-4153*
- Matveev, A.S., Machado, J.E., Ortega, R., Schiffer, J., and Pyrkin, A., A Tool for Analysis of Existence of Equilibria and Voltage Stability in Power Systems With Constant Power Loads; *TAC Nov. 2020* 4726-4740

- Mauroy, A., and Goncalves, J., Koopman-Based Lifting Techniques for Nonlinear Systems Identification; *TAC June 2020 2550-2565*
- Mazenc, F., and Malisoff, M., Continuous Discrete Sequential Observers for Time-Varying Systems Under Sampling and Input Delays; *TAC April 2020* 1704-1709
- Mazo, M., see Proskurnikov, A.V., TAC Feb. 2020 507-521
- Mazumdar, E., see Ratliff, L.J., TAC March 2020 1256-1263
- Mei, J., see Chen, L., TAC Nov. 2020 4941-4948
- Mei, Z., see Guo, B., TAC June 2020 2612-2618
- Mencakova, K., see Diblik, J., TAC Dec. 2020 5472-5479
- Mendoza-Avila, J., Moreno, J.A., and Fridman, L.M., Continuous Twisting Algorithm for Third-Order Systems; *TAC July 2020 2814-2825*
- Meng, D., Du, M., and Wu, Y., Extended Structural Balance Theory and Method for Cooperative–Antagonistic Networks; *TAC May 2020 2147-2154*
- Meng, H., Zhang, H., Wang, Z., and Chen, G., Event-Triggered Control for Semiglobal Robust Consensus of a Class of Nonlinear Uncertain Multiagent Systems; *TAC April 2020 1683-1690*
- Meng, Z., see Huang, B., TAC Feb. 2020 801-808
- Mercere, G., see Prot, O., TAC Aug. 2020 3272-3285
- Mezic, I., see Korda, M., TAC Dec. 2020 5114-5129
- Michiels, W., see Borgioli, F., TAC April 2020 1747-1754
- Michiels, W., see Gomez, M.A., TAC May 2020 2192-2199
- Miculescu, D., and Karaman, S., Polling-Systems-Based Autonomous Vehicle Coordination in Traffic Intersections With No Traffic Signals; *TAC Feb.* 2020 680-694
- Middleton, R.H., see Ferguson, J., TAC April 2020 1710-1715
- Milosevic, J., Teixeira, A., Johansson, K.H., and Sandberg, H., Actuator Security Indices Based on Perfect Undetectability: Computation, Robustness, and Sensor Placement; *TAC Sept. 2020 3816-3831*
- Mizutani, E., A Proof on Equivalence of Stagewise Newton and Dreyfus's Successive Approximation Procedures; *TAC June 2020 2716-2723*
- Mo, Y., see Wang, J., TAC Feb. 2020 591-603
- Mo, Y., see Liu, H., TAC Sept. 2020 3895-3902
- Mo, Y., see Ren, X., TAC Sept. 2020 3742-3757
- Mo, Y., see Xu, L., TAC Nov. 2020 4981-4988
- Mo, Y., see Xu, L., TAC Jan. 2020 279-286
- Mo, Y., see Ni, Y., TAC Jan. 2020 419-425
- Mohajerani, S., and Lafortune, S., Transforming Opacity Verification to Nonblocking Verification in Modular Systems; *TAC April 2020 1739-1746*
- Mohajerani, S., Ji, Y., and Lafortune, S., Compositional and Abstraction-Based Approach for Synthesis of Edit Functions for Opacity Enforcement; *TAC* Aug. 2020 3349-3364
- Mohammadi, H., see Zare, A., TAC Aug. 2020 3441-3456
- Mohan, S., see Zhao, P., TAC May 2020 2062-2077
- Molloy, T.L., Inga, J., Flad, M., Ford, J.J., Perez, T., and Hohmann, S., Inverse Open-Loop Noncooperative Differential Games and Inverse Optimal Control; *TAC Feb. 2020 897-904*
- Mondie, S., see Ortiz, R., TAC Oct. 2020 4377-4384
- Monshizadeh, N., see Simpson-Porco, J.W., TAC May 2020 2032-2045
- Moon, J., and Duncan, T.E., A Simple Proof of Indefinite Linear-Quadratic Stochastic Optimal Control With Random Coefficients; *TAC Dec. 2020 5422-5428*
- Moothedath, S., Sahabandu, D., Allen, J., Clark, A., Bushnell, L., Lee, W., and Poovendran, R., A Game-Theoretic Approach for Dynamic Information Flow Tracking to Detect Multistage Advanced Persistent Threats; *TAC Dec.* 2020 5248-5263
- Moothedath, S., see Joshi, A., TAC Dec. 2020 5517-5524
- Moradian, H., and Kia, S.S., On the Positive Effect of Delay on the Rate of Convergence of a Class of Linear Time-Delayed Systems; *TAC Nov. 2020* 4832-4839
- Morarescu, I., see Varma, V.S., TAC Oct. 2020 4324-4331
- Moreno, J.A., see Apaza-Perez, W.A., TAC March 2020 1348-1355
- Moreno, J.A., see Mendoza-Avila, J., TAC July 2020 2814-2825
- Moreno, J.A., see Cruz-Zavala, E., TAC Oct. 2020 4316-4323
- Mortel-Fronczak, J.v.d., see Goorden, M., TAC April 2020 1625-1639
- Motahari, A.S., see Sanjaroon, V., TAC Aug. 2020 3655-3662
- Motee, N., see Siami, M., TAC Feb. 2020 733-740

- Motee, N., see Somarakis, C., TAC Aug. 2020 3544-3559
- Mou, S., see Wang, X., TAC March 2020 1132-1143
- Mou, S., see Zhou, J., TAC April 2020 1691-1696
- Mousavi, S.H., see Noroozi, N., TAC March 2020 1203-1210
- Mousavi, S.H., see Ghodrat, M., TAC June 2020 2708-2715
- Muller, M.A., see Kohler, J., TAC Aug. 2020 3576-3583

Munoz-Vazquez, A.J., see Jimenez-Rodriguez, E., TAC Nov. 2020 4922-4927

- Murguia, C., Farokhi, F., and Shames, I., Secure and Private Implementation of Dynamic Controllers Using Semihomomorphic Encryption; *TAC Sept. 2020* 3950-3957
- Mylvaganam, T., and Sassano, M., Disturbance Attenuation by Measurement Feedback in Nonlinear Systems via Immersion and Algebraic Conditions; *TAC Feb. 2020 854-860*

Ν

- Nadri, M., see de Cossio, F.G., TAC Dec. 2020 5205-5219
- Nakabayashi, A., and Ueno, G., Nonlinear Filtering Method Using a Switching Error Model for Outlier-Contaminated Observations; *TAC July 2020 3150-3156*
- Nakahira, Y., and Chen, L., An Integrative Perspective to LQ and ℓ_{∞} Control for Delayed and Quantized Systems; *TAC Nov. 2020* 4781-4792
- Nakic, I., see Jokic, A., TAC March 2020 970-985
- Nandiganahalli, J.S., Kwon, C., and Hwang, I., Delay-Tolerant Adaptive Robust Tracking Control of Uncertain Time-Delay Systems; *TAC Feb. 2020* 695-710
- Narvaez, A.R.R., and Costa, E.F., Control of Continuous-Time Linear Systems With Markov Jump Parameters in Reverse Time; *TAC May 2020 2265-2271*
- **Necoara, I.,** and Ionescu, T.C., *H*₂ Model Reduction of Linear Network Systems by Moment Matching and Optimization; *TAC Dec. 2020 5328-5335*
- Nesic, D., see Wang, W., TAC Feb. 2020 620-635
- Nesic, D., see Astolfi, D., TAC July 2020 2867-2882
- Nesic, D., see Maass, A.I., TAC July 2020 2992-3006
- Nguang, S.K., see Feng, Q., TAC March 2020 1356-1363
- Nguang, S.K., see Yan, S., TAC Oct. 2020 4295-4301
- Ni, Y., Li, X., Zhang, J., and Krstic, M., Equilibrium Solutions of Multiperiod Mean-Variance Portfolio Selection; *TAC April 2020 1716-1723*
- Ni, Y., Guo, Z., Mo, Y., and Shi, L., On the Performance Analysis of Reset Attack in Cyber-Physical Systems; *TAC Jan. 2020 419-425*
- Nicotra, M.M., Liao-McPherson, D., Burlion, L., and Kolmanovsky, I.V., Spacecraft Attitude Control With Nonconvex Constraints: An Explicit Reference Governor Approach; *TAC Aug. 2020 3677-3684*
- Nicotra, M.M., see Liao-McPherson, D., TAC Oct. 2020 4288-4294
- Niculescu, S., see Cardeliquio, C.B., TAC April 2020 1640-1646
- Nie, X., see Feng, Y., TAC May 2020 2272-2277
- Nijmeijer, H., see Rijnen, M., TAC Nov. 2020 4568-4583
- Nilsson, P., and Ozay, N., Control Synthesis for Permutation-Symmetric High-Dimensional Systems With Counting Constraints; *TAC Feb. 2020* 461-476
- Ning, L., Smooth Interpolation of Covariance Matrices and Brain Network Estimation: Part II; TAC May 2020 1901-1910
- Ning, Z., Zhang, L., and Colaneri, P., Semi-Markov Jump Linear Systems With Incomplete Sojourn and Transition Information: Analysis and Synthesis; *TAC Jan. 2020 159-174*
- Nishimura, Y., and Tsubakino, D., Local Controllability of Single-Input Nonlinear Systems Based on Deterministic Wiener Processes; *TAC Jan. 2020* 354-360
- Niu, L., and Clark, A., Optimal Secure Control With Linear Temporal Logic Constraints; *TAC June 2020 2434-2449*
- Niu, Y., see Cao, Z., TAC March 2020 1264-1271
- Niu, Y., see Xu, J., TAC Dec. 2020 5464-5471
- Nonami, K., see Luo, J., TAC Jan. 2020 397-403
- Noroozi, N., Geiselhart, R., Mousavi, S.H., Postoyan, R., and Wirth, F.R., Integral Input-to-State Stability of Networked Control Systems; *TAC March* 2020 1203-1210
- Notarstefano, G., see Testa, A., TAC April 2020 1456-1467

Notarstefano, G., see Sasso, F., TAC Jan. 2020 223-236

- Novara, C., see Possieri, C., TAC Nov. 2020 4808-4815
- Novoselnik, B., Spudic, V., and Baotic, M., Parametric Optimization Based MPC for Systems of Systems With Affine Coordination Constraints; *TAC Feb. 2020 649-663*
- Nowzari, C., see Watkins, N.J., TAC March 2020 1116-1131
- Nunnari, G., see Buscarino, A., TAC Feb. 2020 727-732
- Nunnari, G., see Bucolo, M., TAC Nov. 2020 4989-4994
- Nuno, E., see Zamora-Gomez, G.I., TAC Feb. 2020 882-889

0

- **Obeid, H.,** Laghrouche, S., Fridman, L., Chitour, Y., and Harmouche, M., Barrier Function-Based Adaptive Super-Twisting Controller; *TAC Nov. 2020* 4928-4933
- Ober-Blobaum, S., see Limebeer, D.J.N., TAC April 2020 1381-1396
- Ogura, M., Kishida, M., and Lam, J., Geometric Programming for Optimal Positive Linear Systems; *TAC Nov. 2020 4648-4663*
- **Oliveira, T.R.,** Feiling, J., Koga, S., and Krstic, M., Multivariable Extremum Seeking for PDE Dynamic Systems; *TAC Nov. 2020 4949-4956*
- Oliver, S.G., see Julvez, J., TAC June 2020 2510-2525
- Ordonez, R., see Djaneye-Boundjou, O., TAC Feb. 2020 749-756
- Orlov, Y., Fradkov, A.L., and Andrievsky, B., Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation; *TAC April 2020 1484-1498*
- Ornik, M., see Savas, Y., TAC April 2020 1552-1567
- Ornik, M., Carr, S., Israel, A., and Topcu, U., Control-Oriented Learning on the Fly; *TAC Nov. 2020 4800-4807*
- Ortega, R., see Ferguson, J., TAC April 2020 1710-1715
- Ortega, R., see Donaire, A., TAC July 2020 3223-3226
- Ortega, R., see Matveev, A.S., TAC Nov. 2020 4726-4740
- Ortiz, R., Valle, S.D., Egorov, A.V., and Mondie, S., Necessary Stability Conditions for Integral Delay Systems; *TAC Oct. 2020 4377-4384*
- Osinenko, P., see Gohrt, T., TAC May 2020 2257-2264
- Ouyang, Y., Gagrani, M., and Jain, R., Posterior Sampling-Based Reinforcement Learning for Control of Unknown Linear Systems; *TAC Aug. 2020* 3600-3607
- Ozay, N., see Nilsson, P., TAC Feb. 2020 461-476

Р

- Paccagnan, D., Chandan, R., and Marden, J.R., Utility Design for Distributed Resource Allocation—Part I: Characterizing and Optimizing the Exact Price of Anarchy; *TAC Nov. 2020 4616-4631*
- Padoan, A., and Astolfi, A., Singularities and Moments of Nonlinear Systems; TAC Aug. 2020 3647-3654
- Paganini, F., and Mallada, E., Global Analysis of Synchronization Performance for Power Systems: Bridging the Theory-Practice Gap; *TAC July 2020 3007-3022*
- Pagano, D.J., see de Andrade, G.A., TAC Dec. 2020 5336-5343
- Pal, D., see Athalye, C.D., TAC July 2020 2929-2940
- Palumbo, P., see Cacace, F., TAC Oct. 2020 3961-3976
- Panagou, D., see Usevitch, J., TAC April 2020 1755-1762
- Panagou, D., Turpin, M., and Kumar, V., Decentralized Goal Assignment and Safe Trajectory Generation in Multirobot Networks via Multiple Lyapunov Functions; *TAC Aug. 2020 3365-3380*
- Pang, Y., and Hu, G., Randomized Gradient-Free Distributed Optimization Methods for a Multiagent System With Unknown Cost Function; *TAC Jan.* 2020 333-340
- Panteley, E., see Maghenem, M.A., TAC Aug. 2020 3639-3646
- Papachristodoulou, A., see Sootla, A., TAC July 2020 3170-3175
- Papi, M., see Cacace, F., TAC Oct. 2020 3961-3976
- Pappas, G.J., see Watkins, N.J., TAC March 2020 1116-1131
- Pappas, G.J., see Tsiamis, A., TAC May 2020 2001-2015
- Pardalos, P., see Wei, Y., TAC April 2020 1800-1806
- Parisini, T., see Wang, Y., TAC June 2020 2309-2324
- Parisini, T., see Li, P., TAC July 2020 3053-3059
- Parisini, T., see Gallo, A.J., TAC Sept. 2020 3800-3815

- Parisini, T., see Barboni, A., TAC Sept. 2020 3728-3741 Park, J.H., see Cheng, J., TAC Nov. 2020 4816-4823
- Pasik-Duncan, B., see Barreiro-Gomez, J., TAC June 2020 2582-2597
- Pasqualetti, F., see Chen, Z., TAC Sept. 2020 3725-3727
- Pasqualetti, F., see Anguluri, R., TAC Sept. 2020 3903-3910
- Pasquini, M., and Angeli, D., On Convergence for Piecewise Affine Models of Gene Regulatory Networks via a Lyapunov Approach; TAC Aug. 2020 3333-3348
- Paternain, S., and Ribeiro, A., Stochastic Artificial Potentials for Online Safe Navigation; *TAC May 2020 1985-2000*
- Patra, S., see Dey, A., TAC March 2020 1333-1339
- Paunonen, L., and Phan, D., Reduced Order Controller Design for Robust Output Regulation; *TAC June 2020 2480-2493*
- Pavel, L., Distributed GNE Seeking Under Partial-Decision Information Over Networks via a Doubly-Augmented Operator Splitting Approach; *TAC April* 2020 1584-1597
- Peng, C., and Sun, H., Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks; *TAC Sept.* 2020 3943-3949
- Peng, D., see Li, X., TAC Nov. 2020 4908-4913
- Peng, Y., Song, J., Xu, J., and Chong, E.K.P., Stochastic Control Framework for Determining Feasible Alternatives in Sampling Allocation; *TAC June 2020* 2647-2653
- Pepe, P., Discrete-Time Systems With Constrained Time Delays and Delay-Dependent Lyapunov Functions; *TAC April 2020 1724-1730*
- Pereira, P.O., Boskos, D., and Dimarogonas, D.V., A Common Framework for Complete and Incomplete Attitude Synchronization in Networks With Switching Topology; *TAC Jan. 2020 271-278*
- Perez, T., see Molloy, T.L., TAC Feb. 2020 897-904
- Perruquetti, W., see Zimenko, K., TAC Dec. 2020 5429-5436
- Petersen, I.R., see Zhang, G., TAC July 2020 3157-3163
- Petersen, I.R., see Gao, Q., TAC Aug. 2020 3693-3700
- Petersen, I.R., see Wang, Y., TAC Nov. 2020 4632-4647
- Petreczky, M., see Jozsa, M., TAC Aug. 2020 3623-3630
- Phan, D., see Paunonen, L., TAC June 2020 2480-2493
- Phogat, K.S., see Chang, D.E., TAC July 2020 3191-3198
- Pigeon, E., see Pouliquen, M., TAC Feb. 2020 786-793
- Pillai, H.K., see Athalye, C.D., TAC July 2020 2929-2940
- Pin, G., see Wang, Y., TAC June 2020 2309-2324
- Pin, G., see Li, P., TAC July 2020 3053-3059
- Pintelon, R., see Schoukens, M., TAC April 2020 1514-1524
- Pintelon, R., see Zhang, Q., TAC Aug. 2020 3671-3676
- Polyakov, A., see Sanchez, T., TAC May 2020 2250-2256
- Polyakov, A., see Brogliato, B., TAC Aug. 2020 3707-3713
- Polyakov, A., see Zimenko, K., TAC Dec. 2020 5429-5436
- Pontes Duff, I., Grundel, S., and Benner, P., New Gramians for Switched Linear Systems: Reachability, Observability, and Model Reduction; *TAC June 2020* 2526-2535
- Poolla, B.K., see Simpson-Porco, J.W., TAC May 2020 2032-2045
- Poovendran, R., see Moothedath, S., TAC Dec. 2020 5248-5263
- Possieri, C., Vidano, S., and Novara, C., A Finite-Time Local Observer in the Original Coordinates for Nonlinear Control Systems; *TAC Nov. 2020 4808-*4815
- Postoyan, R., see Wang, W., TAC Feb. 2020 620-635
- Postoyan, R., see Noroozi, N., TAC March 2020 1203-1210
- Postoyan, R., see Astolfi, D., TAC July 2020 2867-2882
- Postoyan, R., see Maass, A.I., TAC July 2020 2992-3006
- Postoyan, R., see Varma, V.S., TAC Oct. 2020 4324-4331
- Poulakakis, I., see Veer, S., TAC June 2020 2371-2386
- Pouliquen, M., Pigeon, E., Gehan, O., and Goudjil, A., Identification Using Binary Measurements for IIR Systems; *TAC Feb. 2020 786-793*
- Prashanth, L.A., Bhatnagar, S., Bhavsar, N., Fu, M., and Marcus, S.I., Random Directions Stochastic Approximation With Deterministic Perturbations; *TAC* June 2020 2450-2465
- Prieur, C., see Vieira, A., TAC June 2020 2743-2750
- Prieur, C., see Marx, S., TAC May 2020 2139-2146
- Prieur, C., see Coutinho, D., TAC May 2020 2300-2307

Prieur, C., see Cerpa, E., TAC Nov. 2020 4846-4853

- Proskurnikov, A.V., and Mazo, M., Lyapunov Event-Triggered Stabilization With a Known Convergence Rate; *TAC Feb. 2020 507-521*
- Prot, O., and Mercere, G., Combining Linear Algebra and Numerical Optimization for Gray-Box Affine State-Space Model Identification; *TAC Aug. 2020* 3272-3285
- Pyrkin, A., see Matveev, A.S., TAC Nov. 2020 4726-4740

Q

- Qi, W., Zong, G., and Karimi, H.R., Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems; *TAC Jan. 2020 361-368*
- Qi, Y., see Fang, C., TAC Sept. 2020 3927-3934
- Qi, Y., see Cheng, P., TAC Oct. 2020 4348-4355
- Qian, F., see He, W., TAC Sept. 2020 3879-3886
- Qian, T., see Wang, X., TAC Feb. 2020 577-590
- Qiao, J., see Wang, D., TAC March 2020 1272-1279
- Qin, J., Ma, Q., Yu, X., and Wang, L., On Synchronization of Dynamical Systems Over Directed Switching Topologies: An Algebraic and Geometric Perspective; *TAC Dec. 2020 5083-5098*
- Qin, Y., Cao, M., and Anderson, B.D.O., Lyapunov Criterion for Stochastic Systems and Its Applications in Distributed Computation; *TAC Feb. 2020* 546-560
- Qiu, L., see Zhao, D., TAC March 2020 1160-1175
- Qiu, T., see Zhang, Z., TAC Feb. 2020 874-881
- Qu, G., and Li, N., Accelerated Distributed Nesterov Gradient Descent; TAC June 2020 2566-2581
- Qu, Z., Thomsen, B.T., and Annaswamy, A.M., Adaptive Control for a Class of Multi-Input Multi-Output Plants With Arbitrary Relative Degree; *TAC July* 2020 3023-3038
- Qu, Z., see Joo, Y., TAC Oct. 2020 4265-4272
- Que, H., see Xu, Z., TAC Oct. 2020 4356-4361

R

- Rabitz, H., see Zhang, J., TAC July 2020 2856-2866
- Rahnama, A., and Antsaklis, P.J., Learning-Based Event-Triggered Control for Synchronization of Passive Multiagent Systems Under Attack; *TAC Oct.* 2020 4170-4185
- Rajpurohit, T., see Haddad, W.M., TAC July 2020 2826-2841
- Raman, A., see Chen, C., TAC Dec. 2020 5236-5247
- Ramasubramanian, B., Cleaveland, R., and Marcus, S.I., Notions of Centralized and Decentralized Opacity in Linear Systems; *TAC April 2020 1442-*1455
- Ramirez, H., see Macchelli, A., TAC Oct. 2020 4440-4447
- Rao, H., see Liao, Y., TAC Dec. 2020 5488-5495
- Rapaport, A., and Dochain, D., A Robust Asymptotic Observer for Systems That Converge to Unobservable States—A Batch Reactor Case Study; *TAC June 2020 2693-2699*
- Ratliff, L.J., and Mazumdar, E., Inverse Risk-Sensitive Reinforcement Learning; TAC March 2020 1256-1263
- Ratliff, L.J., see Westenbroek, T., TAC April 2020 1537-1551
- Ratliff, L.J., see Sekar, S., TAC Nov. 2020 4600-4615
- Rawlings, J.B., see Risbeck, M.J., TAC July 2020 2957-2968
- Reichhartinger, M., see Koch, S., TAC Feb. 2020 757-762
- Ren, W., see Huang, B., TAC Feb. 2020 801-808
- Ren, W., see Wang, H., TAC June 2020 2760-2767
- Ren, W., and Xiong, J., Tracking Control of Nonlinear Networked and Quantized Control Systems With Communication Delays; *TAC Aug. 2020 3685-3692*
- Ren, X., see Wang, J., TAC Feb. 2020 591-603
- Ren, X., Mo, Y., Chen, J., and Johansson, K.H., Secure State Estimation With Byzantine Sensors: A Probabilistic Approach; *TAC Sept. 2020 3742-3757*
- Reniers, M., see Goorden, M., TAC April 2020 1625-1639
- Reveliotis, S., and Masopust, T., Efficient Liveness Assessment for Traffic States in Open, Irreversible, Dynamically Routed, Zone-Controlled Guidepath-Based Transport Systems; *TAC July 2020 2883-2898*

Rezaee, H., see Barboni, A., TAC Sept. 2020 3728-3741

- Rezaie, R., and Li, X.R., Gaussian Conditionally Markov Sequences: Singular/ Nonsingular; TAC May 2020 2286-2293
- Rezaienia, P., Gharesifard, B., Linder, T., and Touri, B., Push-Sum on Random Graphs: Almost Sure Convergence and Convergence Rate; *TAC March 2020* 1295-1302
- Ribeiro, A., see Paternain, S., TAC May 2020 1985-2000
- Rijnen, M., Biemond, J.J.B., Wouw, N.v.d., Saccon, A., and Nijmeijer, H., Hybrid Systems With State-Triggered Jumps: Sensitivity-Based Stability Analysis With Application to Trajectory Tracking; *TAC Nov. 2020 4568-4583*
- Rios, H., Davila, J., and Teel, A.R., Linear Hybrid Systems With Periodic Jumps: A Notion of Strong Observability and Strong Detectability; *TAC June 2020 2640-2646*
- Risbeck, M.J., and Rawlings, J.B., Economic Model Predictive Control for Time-Varying Cost and Peak Demand Charge Optimization; *TAC July 2020* 2957-2968
- Risuleo, R.S., Bottegal, G., and Hjalmarsson, H., Identification of Linear Models From Quantized Data: A Midpoint-Projection Approach; *TAC July 2020* 2801-2813
- Romero, J.G., see Donaire, A., TAC July 2020 3223-3226
- Rooda, J., see Goorden, M., TAC April 2020 1625-1639
- Rotella, F., see Sakhraoui, I., TAC Feb. 2020 831-838
- Rovithakis, G.A., see Kanakis, G.S., TAC May 2020 1956-1968
- Rovithakis, G.A., see Dimanidis, I.S., TAC Dec. 2020 5058-5069
- Rucco, A., see Testa, A., TAC April 2020 1456-1467

S

- Saadatniaki, F., Xin, R., and Khan, U.A., Decentralized Optimization Over Time-Varying Directed Graphs With Row and Column-Stochastic Matrices; *TAC Nov. 2020 4769-4780*
- Saadi, W., Boutat, D., Zheng, G., Sbita, L., and Yu, L., Algorithm to Compute Nonlinear Partial Observer Normal Form With Multiple Outputs; *TAC June* 2020 2700-2707

Saccon, A., see Rijnen, M., TAC Nov. 2020 4568-4583

- Sahabandu, D., see Moothedath, S., TAC Dec. 2020 5248-5263
- Saize, S., see Erhardsson, T., TAC Nov. 2020 4840-4845
- Sakhraoui, I., Trajin, B., and Rotella, F., Design Procedure for Linear Unknown Input Functional Observers; TAC Feb. 2020 831-838
- Salapaka, M.V., see Materassi, D., TAC Oct. 2020 4138-4153
- Saldi, N., Yuksel, S., and Linder, T., Asymptotic Optimality of Finite Model Approximations for Partially Observed Markov Decision Processes With Discounted Cost; *TAC Jan. 2020 130-142*
- Saldi, N., A Topology for Team Policies and Existence of Optimal Team Policies in Stochastic Team Theory; TAC Jan. 2020 310-317
- Salhab, R., Malhame, R.P., and Le Ny, J., Collective Stochastic Discrete Choice Problems: A Min-LQG Dynamic Game Formulation; *TAC Aug. 2020 3302-3316*
- Salton, A.T., see Castro, R.d.S., TAC Nov. 2020 4860-4865
- Sanchez, E.N., see Lopez, V.G., TAC May 2020 1911-1923
- Sanchez, T., Polyakov, A., Fridman, E., and Hetel, L., A Switching Controller for a Class of MIMO Bilinear Systems With Time Delay; *TAC May 2020* 2250-2256
- Sanchez-Torres, J.D., see Jimenez-Rodriguez, E., TAC Nov. 2020 4922-4927
- Sandberg, H., see Milosevic, J., TAC Sept. 2020 3816-3831
- Sanfelice, R.G., see Casau, P., TAC May 2020 1870-1885
- Sanfelice, R.G., see Altin, B., TAC Aug. 2020 3381-3396
- Sanjaroon, V., Farhadi, A., Motahari, A.S., and Khalaj, B.H., Stabilization of Nonlinear Dynamic Systems Over Limited Capacity Communication Channels; *TAC Aug. 2020 3655-3662*
- Saraf, N., and Bemporad, A., A Bounded-Variable Least-Squares Solver Based on Stable QR Updates; *TAC March 2020 1242-1247*
- Sarafrazi, M.A., see Carravetta, F., TAC Feb. 2020 867-873
- Sardina, S., see Ciolek, D.A., TAC Aug. 2020 3502-3516
- Sarlette, A., see Farnam, A., TAC April 2020 1652-1659
- Sassano, M., see Mylvaganam, T., TAC Feb. 2020 854-860

- Sassano, M., and Astolfi, A., Optimality and Passivity of Input-Quadratic Nonlinear Systems; *TAC Aug. 2020 3229-3240*
- Sassano, M., and Astolfi, A., Combining Pontryagin's Principle and Dynamic Programming for Linear and Nonlinear Systems; *TAC Dec. 2020 5312-5327*
- Sassano, M., and Astolfi, A., Model Matching and Passivation of MIMO Linear Systems via Dynamic Output Feedback and Feedforward; *TAC Oct. 2020* 4016-4030
- Sasso, F., Coluccia, A., and Notarstefano, G., Interaction-Based Distributed Learning in Cyber-Physical and Social Networks; *TAC Jan. 2020 223-236*
- Sastry, S.S., see Westenbroek, T., TAC April 2020 1537-1551
- Sato, H., see Sato, K., TAC Nov. 2020 4493-4508
- Sato, K., Sato, H., and Damm, T., Riemannian Optimal Identification Method for Linear Systems With Symmetric Positive-Definite Matrix; *TAC Nov.* 2020 4493-4508
- Sato, M., Observer-Based Robust Controller Design With Simultaneous Optimization of Scaling Matrices; TAC Feb. 2020 861-866
- Saussie, D., see Lhachemi, H., TAC March 2020 1248-1255
- Savas, Y., Ornik, M., Cubuktepe, M., Karabag, M.O., and Topcu, U., Entropy Maximization for Markov Decision Processes Under Temporal Logic Constraints; *TAC April 2020 1552-1567*
- Savla, K., see Ba, Q., TAC June 2020 2402-2417
- Sayed, A.H., see Alghunaim, S.A., TAC Nov. 2020 4554-4567
- Sayed, A.H., see Alghunaim, S.A., TAC Jan. 2020 175-190
- Sbita, L., see Saadi, W., TAC June 2020 2700-2707
- Scarciotti, G., see Franco, P.D., TAC May 2020 2107-2122
- Schaft, A.v.d., see Fang, Z., TAC Aug. 2020 3457-3470
- Scherpen, J.M.A., see Kawano, Y., TAC May 2020 2094-2106
- Scherpen, J.M.A., see Cheng, X., TAC Oct. 2020 4393-4399
- Schiffer, J., see Matveev, A.S., TAC Nov. 2020 4726-4740
- Schoukens, J., see Schoukens, M., TAC April 2020 1514-1524
- Schoukens, M., Pintelon, R., Dobrowiecki, T.P., and Schoukens, J., Extending the Best Linear Approximation Framework to the Process Noise Case; *TAC April 2020 1514-1524*
- Scott, J.K., see Yang, X., TAC Dec. 2020 5043-5057
- Scutari, G., see Tian, Y., TAC Dec. 2020 5264-5279
- Seatzu, C., see Giua, A., TAC July 2020 3092-3097
- Sekar, S., Zheng, L., Ratliff, L.J., and Zhang, B., Uncertainty in Multicommodity Routing Networks: When Does It Help?; *TAC Nov. 2020 4600-4615*
- Semenov, A., see Aleksandrov, A., TAC Feb. 2020 794-800
- Sen, S., see Dey, A., TAC March 2020 1333-1339
- Sepehr, F., and Materassi, D., Blind Learning of Tree Network Topologies in the Presence of Hidden Nodes; *TAC March 2020 1014-1028*
- Serrani, A., see Wang, Y., TAC June 2020 2309-2324
- Seuret, A., see Feng, Q., TAC March 2020 1356-1363
- Shahrampour, S., see Su, L., TAC Sept. 2020 3758-3771
- Shakarami, M., Esfandiari, K., Suratgar, A.A., and Talebi, H.A., Peaking Attenuation of High-Gain Observers Using Adaptive Techniques: State Estimation and Feedback Control; *TAC Oct. 2020* 4215-4229
- Shames, I., see Murguia, C., TAC Sept. 2020 3950-3957
- Shamma, J.S., see Li, L., TAC July 2020 2785-2800
- Shanbhag, U.V., see Xie, Y., TAC June 2020 2355-2370
- Shao, G., Teel, A.R., Tan, Y., Liu, K., and Wang, R., Extremum Seeking Control With Input Dead-Zone; *TAC July 2020 3184-3190*
- Shao, H., see Luo, J., TAC Jan. 2020 397-403
- Shao, J., see Gan, R., TAC Sept. 2020 3832-3846
- Sharifnassab, A., Tsitsiklis, J.N., and Golestani, S.J., Sensitivity to Cumulative Perturbations for a Class of Piecewise Constant Hybrid Systems; *TAC March* 2020 1057-1072
- Sharma, H., see Haskell, W.B., TAC Jan. 2020 115-129
- Sharon, G., see Ben Avraham, T., TAC March 2020 941-954
- Sheller, B., see Albertini, F., TAC March 2020 1176-1191
- Shen, C., see Xi, K., TAC July 2020 2913-2928
- Shen, D., and Xu, J., An Iterative Learning Control Algorithm With Gain Adaptation for Stochastic Systems; *TAC March 2020 1280-1287*
- Shen, H., see Li, F., TAC Aug. 2020 3701-3706
- Shen, M., see Yan, S., TAC Oct. 2020 4295-4301
- Shen, T., see Cheng, D., TAC Dec. 2020 5444-5449

- Shen, X., see Liao, Y., TAC Dec. 2020 5488-5495
- Shen, Y., Wu, Z., Shi, P., and Ahn, C.K., Model Reduction of Markovian Jump Systems With Uncertain Probabilities; *TAC Jan. 2020 382-388*
- Shi, C., and Yang, G., Distributed Learning Over Networks: Effect of Using Historical Observations; *TAC Dec. 2020 5503-5509*
- Shi, D., see Jiang, Y., TAC Nov. 2020 4965-4972
- Shi, D., see Kung, E., TAC Oct. 2020 4302-4307
- Shi, G., see Fontan, A., TAC May 2020 1855-1869
- Shi, L., see Wang, J., TAC Feb. 2020 591-603
- Shi, L., see He, X., TAC Jan. 2020 28-43
- Shi, L., see Ni, Y., TAC Jan. 2020 419-425
- Shi, L., see Cheng, P., TAC Oct. 2020 4348-4355
- Shi, L., see Kung, E., TAC Oct. 2020 4302-4307
- Shi, M., Tesi, P., and De Persis, C., Self-Triggered Network Coordination Over Noisy Communication Channels; *TAC Jan. 2020 263-270*
- Shi, P., see Zhang, B., TAC March 2020 1318-1324
- Shi, P., see Shen, Y., TAC Jan. 2020 382-388
- Shi, P., see Xu, Z., TAC Oct. 2020 4356-4361
- Shi, X., Cao, J., Yu, X., and Wen, G., Finite-Time Stability of Network Systems With Discontinuous Dynamics Over Signed Digraphs; *TAC Nov. 2020 4874-*4881
- Shi, Y., see Liu, C., TAC Feb. 2020 778-785
- Shi, Y., see Liu, C., TAC Jan. 2020 302-309
- Shi, Y., see Cai, B., TAC Jan. 2020 442-449
- Shim, H., see Lee, J.G., TAC Sept. 2020 3935-3942
- Shim, H., see Kim, T., TAC Nov. 2020 4664-4678
- Shmaliy, Y.S., see Uribe-Murcia, K.J., TAC May 2020 2155-2162
- Shokri, M., and Kebriaei, H., Leader–Follower Network Aggregative Game With Stochastic Agents' Communication and Activeness; *TAC Dec. 2020* 5496-5502
- Shorten, R., see Lhachemi, H., TAC March 2020 1248-1255
- Shorten, R., see Ferraro, P., TAC Sept. 2020 3772-3783
- Shu, Z., see Liu, J.J.R., TAC June 2020 2724-2729
- Siami, M., Motee, N., Buzi, G., Bamieh, B., Khammash, M., and Doyle, J.C., Fundamental Limits and Tradeoffs in Autocatalytic Pathways; *TAC Feb.* 2020 733-740
- Silvestre, C., see Casau, P., TAC May 2020 1870-1885
- Simpson-Porco, J.W., Poolla, B.K., Monshizadeh, N., and Dorfler, F., Input– Output Performance of Linear–Quadratic Saddle-Point Algorithms With Application to Distributed Resource Allocation Problems; *TAC May 2020* 2032-2045
- Sinha, A., and Anastasopoulos, A., Distributed Mechanism Design With Learning Guarantees for Private and Public Goods Problems; *TAC Oct. 2020* 4106-4121
- Sloth, C., see Wisniewski, R., TAC Dec. 2020 5220-5235
- Smith, M.C., see Georgiou, T.T., TAC Jan. 2020 252-262
- Somarakis, C., Ghaedsharaf, Y., and Motee, N., Risk of Collision and Detachment in Vehicle Platooning: Time-Delay–Induced Limitations and Tradeoffs; *TAC Aug. 2020 3544-3559*
- Sone, A., see Wang, Y., TAC Nov. 2020 4632-4647
- Song, C., Wang, H., Tian, Y., and Zheng, G., Event-Triggered Observer Design for Delayed Output-Sampled Systems; *TAC Nov. 2020 4824-4831*
- Song, G., and Tao, G., A Partial-State Feedback Model Reference Adaptive Control Scheme; *TAC Jan. 2020 44-57*
- Song, J., see Cao, Z., TAC March 2020 1264-1271
- Song, J., see Peng, Y., TAC June 2020 2647-2653
- Song, Y., see Chen, G., TAC Nov. 2020 4914-4921
- Sootla, A., Zheng, Y., and Papachristodoulou, A., On the Existence of Block-Diagonal Solutions to Lyapunov and H_∞ Riccati Inequalities; *TAC July 2020* 3170-3175
- Soudjani, S., see Lavaei, A., TAC Dec. 2020 5280-5295
- Speyer, J.L., see Clemens, J.W., TAC May 2020 2078-2093
- Spudic, V., see Novoselnik, B., TAC Feb. 2020 649-663
- Sreenivas, R.S., see Chen, C., TAC Dec. 2020 5236-5247
- Stavrou, P.A., Tanaka, T., and Tatikonda, S., The Time-Invariant Multidimensional Gaussian Sequential Rate-Distortion Problem Revisited; *TAC May* 2020 2245-2249

- Stefanovski, J., Novel All-Pass Factorization, All Solutions to Rational Matrix Equation and Control Application; *TAC July 2020 3176-3183*
- Streif, S., see Gohrt, T., TAC May 2020 2257-2264
- Su, H., see Zhu, Y., TAC Dec. 2020 5344-5351
- Su, H., see Luo, J., TAC Jan. 2020 397-403
- Su, H., see Wang, L., TAC Oct. 2020 4340-4347
- Su, H., see Tao, J., TAC Oct. 2020 4047-4060
- Su, H., see Xu, Z., TAC Oct. 2020 4356-4361
- Su, L., see Yan, Y., TAC Aug. 2020 3241-3255
- Su, L., and Shahrampour, S., Finite-Time Guarantees for Byzantine-Resilient Distributed State Estimation With Noisy Measurements; *TAC Sept. 2020* 3758-3771
- Su, L., Gupta, V., and Chesi, G., Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel; *TAC Nov. 2020 4902-4907*
- Su, W., see Chen, G., TAC Aug. 2020 3409-3424
- Subramanian, J., and Mahajan, A., Renewal Monte Carlo: Renewal Theory-Based Reinforcement Learning; *TAC Aug. 2020 3663-3670*
- Sun, H., Zhang, Y., and Liu, W., Explicit Iterative Algorithms for Continuous Coupled Lyapunov Matrix Equations; *TAC Aug. 2020 3631-3638*
- Sun, H., see Peng, C., TAC Sept. 2020 3943-3949
- Sun, J., see Wu, G., TAC Sept. 2020 3919-3926
- Sun, T., Tong, L., and Feng, D., On the Dynamics of Distributed Energy Adoption: Equilibrium, Stability, and Limiting Capacity; *TAC Jan. 2020 102-114* Sun, Y., see Tian, Y., *TAC Dec. 2020 5264-5279*
- Suratgar, A.A., see Shakarami, M., TAC Oct. 2020 4215-4229

Т

- Talebi, H.A., see Shakarami, M., TAC Oct. 2020 4215-4229
- Talebi, S.P., Werner, S., and Mandic, D.P., Quaternion-Valued Distributed Filtering and Control; *TAC Oct. 2020 4246-4257*
- Tallapragada, P., see Khojasteh, M.J., TAC March 2020 925-940
- Tan, R., see Fang, C., TAC Sept. 2020 3927-3934
- Tan, Y., see Shao, G., TAC July 2020 3184-3190
- Tan, Y., see Lee, T., TAC May 2020 2123-2138
- Tanaka, T., see Stavrou, P.A., TAC May 2020 2245-2249
- Tannenbaum, A., see Chen, Y., TAC July 2020 2979-2991
- Tanwani, A., and Zhu, Q., Feedback Nash Equilibrium for Randomly Switching Differential–Algebraic Games; *TAC Aug. 2020 3286-3301*
- Tao, G., see Song, G., TAC Jan. 2020 44-57
- Tao, J., Yang, L., Wu, Z., Wang, X., and Su, H., Lebesgue-Approximation Model Predictive Control of Nonlinear Sampled-Data Systems; *TAC Oct.* 2020 4047-4060
- Tatikonda, S., see Stavrou, P.A., TAC May 2020 2245-2249
- Tavazoei, M.S., see Badri, V., TAC Dec. 2020 5450-5455
- Tayakout-Fayolle, M., see Terrand-Jeanne, A., TAC Jan. 2020 58-71
- Tayebi, A., see Wang, M., TAC Dec. 2020 5173-5188
- Teel, A.R., see Rios, H., TAC June 2020 2640-2646
- Teel, A.R., see Shao, G., TAC July 2020 3184-3190
- Teixeira, A., see Milosevic, J., TAC Sept. 2020 3816-3831
- Tembine, H., see Barreiro-Gomez, J., TAC June 2020 2582-2597
- Terrand-Jeanne, A., Andrieu, V., Martins, V.D.S., and Xu, C., Adding Integral Action for Open-Loop Exponentially Stable Semigroups and Application to Boundary Control of PDE Systems; *TAC Nov. 2020 4481-4492*
- Terrand-Jeanne, A., Andrieu, V., Tayakout-Fayolle, M., and Dos Santos Martins, V., Regulation of Inhomogeneous Drilling Model With a P-I Controller; *TAC Jan. 2020 58-71*
- Tesi, P., see De Persis, C., TAC March 2020 909-924
- Tesi, P., see van Waarde, H.J., TAC Nov. 2020 4525-4537
- Tesi, P., see Shi, M., TAC Jan. 2020 263-270
- Testa, A., Rucco, A., and Notarstefano, G., Distributed Mixed-Integer Linear Programming via Cut Generation and Constraint Exchange; *TAC April 2020* 1456-1467
- Thomsen, B.T., see Qu, Z., TAC July 2020 3023-3038
- Tian, B., see Zuo, Z., TAC April 2020 1771-1778
- Tian, Y., Sun, Y., and Scutari, G., Achieving Linear Convergence in Distributed Asynchronous Multiagent Optimization; *TAC Dec. 2020 5264-5279*

- Tian, Y., see Song, C., TAC Nov. 2020 4824-4831
- Tomei, P., see Verrelli, C.M., TAC June 2020 2634-2639
- Tong, L., see Sun, T., TAC Jan. 2020 102-114
- Topcu, U., see Savas, Y., TAC April 2020 1552-1567
- Topcu, U., see Ornik, M., TAC Nov. 2020 4800-4807
- Topcu, U., see Ahmadi, M., TAC Nov. 2020 4934-4940
- Touri, B., see Rezaienia, P., TAC March 2020 1295-1302
- **Touri, B.,** and Gharesifard, B., A Modified Saddle-Point Dynamics for Distributed Convex Optimization on General Directed Graphs; *TAC July 2020 3098-3103*
- Trajin, B., see Sakhraoui, I., TAC Feb. 2020 831-838
- Trelat, E., see Bonalli, R., TAC June 2020 2418-2433
- Trentelman, H.L., see Jiao, J., TAC March 2020 1218-1225

Trentelman, H.L., see Chen, Z., TAC Sept. 2020 3725-3727

- Trentelman, H.L., see van Waarde, H.J., TAC Nov. 2020 4753-4768
- Trentelman, H.L., see Jia, J., TAC Oct. 2020 3977-3990
- Trinh, M.H., Zelazo, D., and Ahn, H., Pointing Consensus and Bearing-Based Solutions to the Fermat–Weber Location Problem; *TAC June 2020 2339-2354*
- Trinh, M.H., Van Tran, Q., and Ahn, H., Minimal and Redundant Bearing Rigidity: Conditions and Applications; *TAC Oct. 2020 4186-4200*
- Tschaikowski, M., Over-Approximation of Fluid Models; TAC March 2020 999-1013
- Tsiamis, A., Gatsis, K., and Pappas, G.J., State-Secrecy Codes for Networked Linear Systems; *TAC May 2020 2001-2015*
- Tsitsiklis, J.N., see Sharifnassab, A., TAC March 2020 1057-1072

Tsubakino, D., see Nishimura, Y., TAC Jan. 2020 354-360

Tsyganova, J.V., see Kulikova, M.V., TAC Oct. 2020 4472-4479

- Turan, M.S., see Gallo, A.J., TAC Sept. 2020 3800-3815
- Turner, M.C., and Drummond, R., Analysis of Systems With Slope Restricted Nonlinearities Using Externally Positive Zames–Falb Multipliers; *TAC April* 2020 1660-1667

Turpin, M., see Panagou, D., TAC Aug. 2020 3365-3380

U

- Uchitel, S., see Ciolek, D.A., TAC Aug. 2020 3502-3516
- Ueno, G., see Nakabayashi, A., TAC July 2020 3150-3156
- Umlauft, J., and Hirche, S., Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning; *TAC Oct. 2020 4154-4169*
- Urata, K., Inoue, M., Ishizaki, T., and Imura, J., Performance Improvement via Iterative Connection of Passive Systems; *TAC March 2020 1325-1332*
- Uribe-Murcia, K.J., Shmaliy, Y.S., Ahn, C.K., and Zhao, S., Unbiased FIR Filtering for Time-Stamped Discretely Delayed and Missing Data; *TAC May* 2020 2155-2162
- Usevitch, J., and Panagou, D., Resilient Leader-Follower Consensus to Arbitrary Reference Values in Time-Varying Graphs; TAC April 2020 1755-1762

V

Valle, S.D., see Ortiz, R., TAC Oct. 2020 4377-4384

Valmorbida, G., see Gahlawat, A., TAC May 2020 1924-1939

- Vamvoudakis, K.G., see Kanellopoulos, A., TAC March 2020 1029-1043
- Van Schuppen, J.H., see Xi, K., TAC July 2020 2913-2928
- Van Tran, Q., see Trinh, M.H., TAC Oct. 2020 4186-4200
- van Waarde, H.J., Eising, J., Trentelman, H.L., and Camlibel, M.K., Data Informativity: A New Perspective on Data-Driven Analysis and Control; *TAC Nov. 2020 4753-4768*
- van Waarde, H.J., Tesi, P., and Camlibel, M.K., Necessary and Sufficient Topological Conditions for Identifiability of Dynamical Networks; *TAC Nov.* 2020 4525-4537
- Varma, V.S., de Oliveira, A.M., Postoyan, R., Morarescu, I., and Daafouz, J., Energy-Efficient Time-Triggered Communication Policies for Wireless Networked Control Systems; *TAC Oct. 2020 4324-4331*

Vasudevan, R., see Zhao, P., TAC May 2020 2062-2077

Vazquez, R., see de Andrade, G.A., TAC Dec. 2020 5336-5343

Veer, S., and Poulakakis, I., Switched Systems With Multiple Equilibria Under Disturbances: Boundedness and Practical Stability; *TAC June 2020 2371-2386*

Veliov, V.M., see Liao-McPherson, D., TAC Oct. 2020 4288-4294

- Verhaegen, M., see Yu, C., TAC Oct. 2020 4201-4214
- Verrelli, C.M., and Tomei, P., Nonanticipating Lyapunov Functions for Persistently Excited Nonlinear Systems; *TAC June 2020 2634-2639*
- Vidano, S., see Possieri, C., TAC Nov. 2020 4808-4815
- Vieira, A., Brogliato, B., and Prieur, C., Quadratic Optimal Control of Linear Complementarity Systems: First-Order Necessary Conditions and Numerical Analysis; *TAC June 2020 2743-2750*
- Vrabel, R., A Note on Uniform Exponential Stability of Linear Periodic Time-Varying Systems; *TAC April 2020 1647-1651*

W

- Wakaiki, M., Cetinkaya, A., and Ishii, H., Stabilization of Networked Control Systems Under DoS Attacks and Output Quantization; *TAC Aug. 2020 3560-3575*
- Wakaiki, M., An LMI Approach to Stability Analysis of Coupled Parabolic Systems; TAC Jan. 2020 404-411
- Wan, N., Li, D., and Hovakimyan, N., A Simplified Approach to Analyze Complementary Sensitivity Tradeoffs in Continuous-Time and Discrete-Time Systems; *TAC April 2020 1697-1703*
- Wan, Y., see Lopez, V.G., TAC May 2020 1911-1923
- Wang, B., and Zhu, Q., Stability Analysis of Discrete-Time Semi-Markov Jump Linear Systems; TAC Dec. 2020 5415-5421
- Wang, C., Wen, C., and Hu, Q., Event-Triggered Adaptive Control for a Class of Nonlinear Systems With Unknown Control Direction and Sensor Faults; *TAC Feb. 2020 763-770*
- Wang, C., Xia, W., and Xie, G., Limit-Cycle-Based Design of Formation Control for Mobile Agents; *TAC Aug. 2020 3530-3543*
- Wang, D., Ha, M., and Qiao, J., Self-Learning Optimal Regulation for Discrete-Time Nonlinear Systems Under Event-Driven Formulation; *TAC March 2020 1272-1279*
- Wang, F., see Wang, J., TAC July 2020 3136-3142
- Wang, G., see Wang, X., TAC Dec. 2020 5296-5311
- Wang, G., see Wu, G., TAC Sept. 2020 3919-3926
- Wang, H., Ren, W., Cheah, C.C., Xie, Y., and Lyu, S., Dynamic Modularity Approach to Adaptive Control of Robotic Systems With Closed Architecture; *TAC June 2020 2760-2767*
- Wang, H., see Song, C., TAC Nov. 2020 4824-4831
- Wang, H., see Yin, X., TAC Jan. 2020 376-381
- Wang, H., and Zhu, Q., Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics; *TAC Oct. 2020 4448-4455*
- Wang, J., Ren, X., Mo, Y., and Shi, L., Whittle Index Policy for Dynamic Multichannel Allocation in Remote State Estimation; *TAC Feb. 2020 591-603*
- Wang, J., Efimov, D., and Bobtsov, A.A., On Robust Parameter Estimation in Finite-Time Without Persistence of Excitation; *TAC April 2020 1731-1738*
- Wang, J., Wang, F., and Liu, X., Exponential Stability of a Schrödinger Equation Through Boundary Coupling a Wave Equation; *TAC July 2020 3136-3142*
- Wang, J., see Zhang, Y., TAC Oct. 2020 4424-4429
- Wang, J., see Kung, E., TAC Oct. 2020 4302-4307
- Wang, L., see Jing, G., TAC Feb. 2020 817-823
- Wang, L., and Kellett, C.M., Adaptive Semiglobal Nonlinear Output Regulation: An Extended-State Observer Approach; *TAC June 2020 2670-2677*
- Wang, L., and Horn, B.K.P., On the Stability Analysis of Mixed Traffic With Vehicles Under Car-Following and Bilateral Control; *TAC July 2020 3076-3083*
- Wang, L., and Horn, B.K.P., On the Chain Stability of Bilateral Control Model; TAC Aug. 2020 3397-3408
- Wang, L., see Qin, J., TAC Dec. 2020 5083-5098
- Wang, L., see Ye, M., TAC Nov. 2020 4679-4694
- Wang, L., see Lu, K., TAC Jan. 2020 426-433

- Wang, L., Wen, C., Liu, Z., Su, H., and Cai, J., Robust Cooperative Output Regulation of Heterogeneous Uncertain Linear Multiagent Systems With Time-Varying Communication Topologies; *TAC Oct. 2020 4340-4347*
- Wang, L.Y., see Liang, S., TAC April 2020 1785-1791
- Wang, L.Y., see Liang, S., TAC Jan. 2020 347-353
- Wang, M., and Tayebi, A., Hybrid Nonlinear Observers for Inertial Navigation Using Landmark Measurements; *TAC Dec. 2020 5173-5188*
- Wang, Q., see Zhao, C., TAC Oct. 2020 4308-4315
- Wang, R., see Shao, G., TAC July 2020 3184-3190
- Wang, S., see Carrasco, J., TAC Nov. 2020 4538-4553
- Wang, T., Zhang, H., and Zhao, Y., Consensus of Multi-Agent Systems Under Binary-Valued Measurements and Recursive Projection Algorithm; *TAC June 2020 2678-2685*
- Wang, W., Postoyan, R., Nesic, D., and Heemels, W.P.M.H., Periodic Event-Triggered Control for Nonlinear Networked Control Systems; *TAC Feb. 2020 620-635*
- Wang, W., see Hou, Y., TAC Aug. 2020 3584-3591
- Wang, W., see Huang, J., TAC Jan. 2020 318-324
- Wang, X., Qian, T., Leong, I., and Gao, Y., Two-Dimensional Frequency-Domain System Identification; *TAC Feb. 2020 577-590*
- Wang, X., Mou, S., and Anderson, B.D.O., Scalable, Distributed Algorithms for Solving Linear Equations via Double-Layered Networks; *TAC March* 2020 1132-1143
- Wang, X., see Zhou, J., TAC April 2020 1691-1696
- Wang, X., Wang, G., and Li, S., Distributed Finite-Time Optimization for Integrator Chain Multiagent Systems With Disturbances; *TAC Dec. 2020 5296-5311*
- Wang, X., see Tao, J., TAC Oct. 2020 4047-4060
- Wang, Y., see Zhang, X., TAC June 2020 2730-2735
- Wang, Y., Pin, G., Serrani, A., and Parisini, T., Removing SPR-Like Conditions in Adaptive Feedforward Control of Uncertain Systems; *TAC June 2020* 2309-2324
- Wang, Y., see Wang, Z., TAC Sept. 2020 3784-3799
- Wang, Y., see Xu, H., TAC Nov. 2020 4793-4799
- Wang, Y., Dong, D., Sone, A., Petersen, I.R., Yonezawa, H., and Cappellaro, P., Quantum Hamiltonian Identifiability via a Similarity Transformation Approach and Beyond; *TAC Nov. 2020 4632-4647*
- Wang, Z., see Liu, S., TAC March 2020 1303-1309
- Wang, Z., see Ding, D., TAC April 2020 1792-1799
- Wang, Z., Luo, X., Yau, S.S., and Zhang, Z., Proper Orthogonal Decomposition Method to Nonlinear Filtering Problems in Medium-High Dimension; *TAC April 2020 1613-1624*
- Wang, Z., see Meng, H., TAC April 2020 1683-1690
- Wang, Z., see Li, W., TAC June 2020 2654-2661
- Wang, Z., see Chen, H., TAC Dec. 2020 5480-5487
- Wang, Z., see Zou, L., TAC Dec. 2020 5368-5375
- Wang, Z., and Wang, Y., An Attack-Resilient Pulse-Based Synchronization Strategy for General Connected Topologies; *TAC Sept. 2020 3784-3799*
- Watkins, N.J., Nowzari, C., and Pappas, G.J., Robust Economic Model Predictive Control of Continuous-Time Epidemic Processes; *TAC March 2020* 1116-1131
- Wei, E., see Mansoori, F., TAC July 2020 2769-2784
- Wei, G., see Liu, S., TAC March 2020 1303-1309
- Wei, G., see Li, W., TAC June 2020 2654-2661
- Wei, Y., Fang, H., Zeng, X., Chen, J., and Pardalos, P., A Smooth Double Proximal Primal-Dual Algorithm for a Class of Distributed Nonsmooth Optimization Problems; *TAC April 2020 1800-1806*
- Weiss, A., see Danielson, C., TAC Oct. 2020 4456-4463
- Welsh, J.S., see Hu, X., TAC Oct. 2020 4005-4015
- Wen, C., see Wang, C., TAC Feb. 2020 763-770
- Wen, C., see Huang, J., TAC Jan. 2020 318-324
- Wen, C., see Wang, L., TAC Oct. 2020 4340-4347
- Wen, G., see Shi, X., TAC Nov. 2020 4874-4881
- Werner, S., see Talebi, S.P., TAC Oct. 2020 4246-4257
- Westenbroek, T., Dong, R., Ratliff, L.J., and Sastry, S.S., Competitive Statistical Estimation With Strategic Data Sources; *TAC April 2020 1537-1551*
- White, L.B., see Bruce-Doust, R., TAC Nov. 2020 4854-4859

- White, L.B., and Carravetta, F., State-Space Realizations and Optimal Smoothing for Gaussian Generalized Reciprocal Processes; *TAC Jan. 2020 389-396*
- Wills, A., see Yu, C., TAC Oct. 2020 4201-4214
- Winkin, J.J., see Hastir, A., TAC April 2020 1525-1536
- Winkin, J.J., see Lamoline, F., TAC Oct. 2020 4258-4264
- Wirth, F.R., see Noroozi, N., TAC March 2020 1203-1210
- Wisniewski, R., see Karabacak, O., TAC July 2020 2969-2978
- Wisniewski, R., Bujorianu, M.L., and Sloth, C., p-Safe Analysis of Stochastic Hybrid Processes; *TAC Dec. 2020 5220-5235*
- Wouw, N.v.d., see Rijnen, M., TAC Nov. 2020 4568-4583
- Wu, F., see Lian, J., TAC Oct. 2020 4332-4339
- Wu, G., Wang, G., Sun, J., and Chen, J., Optimal Partial Feedback Attacks in Cyber-Physical Power Systems; *TAC Sept. 2020 3919-3926*
- Wu, J., and Chou, Y., State-Constrained Nonlinear L₂-Gain Control; TAC Feb. 2020 771-777
- Wu, J., see Kung, E., TAC Oct. 2020 4302-4307
- Wu, W., see Luo, J., TAC Jan. 2020 397-403
- Wu, X., see Feng, H., TAC May 2020 1841-1854
- Wu, Y., Isidori, A., Lu, R., and Khalil, H.K., Performance Recovery of Dynamic Feedback-Linearization Methods for Multivariable Nonlinear Systems; *TAC April 2020 1365-1380*
- Wu, Y., see Meng, D., TAC May 2020 2147-2154
- Wu, Z., see Li, Z., TAC April 2020 1763-1770
- Wu, Z., see Shen, Y., TAC Jan. 2020 382-388
- Wu, Z., see Tao, J., TAC Oct. 2020 4047-4060
- Wu, Z., see Xu, Z., TAC Oct. 2020 4356-4361

Х

- Xi, K., Lin, H.X., Shen, C., and Van Schuppen, J.H., Multilevel Power-Imbalance Allocation Control for Secondary Frequency Control of Power Systems; *TAC July 2020 2913-2928*
- Xia, D., see Fei, C., TAC July 2020 2899-2912
- Xia, Q., Remarks on "Consistent Abstractions of Affine Control Systems" TAC Oct. 2020 4430-4433
- Xia, W., see Wang, C., TAC Aug. 2020 3530-3543
- Xia, X., see Zhu, B., TAC May 2020 2223-2229
- Xia, Y., see Yang, H., TAC Dec. 2020 5376-5383
- Xiang, S., see Zhou, H., TAC May 2020 1940-1955
- Xiao, Y., see Gan, R., TAC Sept. 2020 3832-3846
- Xie, G., see Wang, C., TAC Aug. 2020 3530-3543
- Xie, L., see Cao, K., TAC June 2020 2598-2611
- Xie, L., see Liu, H., TAC Sept. 2020 3895-3902
- Xie, L., see Xu, L., TAC Nov. 2020 4981-4988
- Xie, L., see Xu, L., TAC Jan. 2020 279-286
- Xie, S., see Zhang, B., TAC March 2020 1318-1324
- Xie, W., see Xu, H., TAC Nov. 2020 4793-4799
- Xie, X., see Li, G., TAC Dec. 2020 5360-5367
- Xie, Y., and Shanbhag, U.V., SI-ADMM: A Stochastic Inexact ADMM Framework for Stochastic Convex Programs; *TAC June 2020 2355-2370*
- Xie, Y., see Wang, H., TAC June 2020 2760-2767
- Xin, R., and Khan, U.A., Distributed Heavy-Ball: A Generalization and Acceleration of First-Order Methods With Gradient Tracking; *TAC June 2020* 2627-2633
- Xin, R., see Saadatniaki, F., TAC Nov. 2020 4769-4780
- Xiong, J., see Ren, W., TAC Aug. 2020 3685-3692
- Xiong, J., see Zheng, G., TAC Dec. 2020 5456-5463
- Xu, C., see Zheng, G., TAC Dec. 2020 5456-5463
- Xu, C., see Feng, H., TAC Nov. 2020 4957-4964
- Xu, C., see Terrand-Jeanne, A., TAC Nov. 2020 4481-4492
- Xu, D., see Liu, C., TAC Feb. 2020 778-785
- Xu, D., see Liu, C., TAC Jan. 2020 302-309
- Xu, H., Yuan, H., Duan, K., Xie, W., and Wang, Y., An Adaptive Gaussian Sum Kalman Filter Based on a Partial Variational Bayesian Method; *TAC Nov.* 2020 4793-4799
- Xu, J., see Boom, T.J.J.v.d., TAC Feb. 2020 905-906
- Xu, J., see Shen, D., TAC March 2020 1280-1287

Xu, J., see Peng, Y., TAC June 2020 2647-2653

- Xu, J., Fridman, E., Fridman, L., and Niu, Y., Static Sliding Mode Control of Systems With Arbitrary Relative Degree by Using Artificial Delay; *TAC Dec. 2020 5464-5471*
- Xu, L., Mo, Y., and Xie, L., Remote State Estimation With Stochastic Event-Triggered Sensor Schedule and Packet Drops; *TAC Nov. 2020 4981-4988*
- Xu, L., Mo, Y., and Xie, L., Distributed Consensus Over Markovian Packet Loss Channels; TAC Jan. 2020 279-286
- Xu, S., see Li, F., TAC Aug. 2020 3701-3706
- Xu, X., Liu, L., and Feng, G., Consensus of Linear Multiagent Systems With Distributed Infinite Transmission Delays: A Low Gain Approach; *TAC Feb.* 2020 809-816
- Xu, X., Liu, L., and Feng, G., Stability and Stabilization of Infinite Delay Systems: A Lyapunov-Based Approach; *TAC Nov. 2020 4509-4524*

- Xu, Z., see Cheng, D., TAC Dec. 2020 5444-5449
- Xu, Z., Wu, Z., Su, H., Shi, P., and Que, H., Energy-to-Peak Filtering of Semi-Markov Jump Systems With Mismatched Modes; *TAC Oct. 2020* 4356-4361
- Xue, B., Franzle, M., and Zhan, N., Inner-Approximating Reachable Sets for Polynomial Systems With Time-Varying Uncertainties; *TAC April 2020* 1468-1483

Y

- Yagan, O., see Zhang, Y., TAC Feb. 2020 711-726
- Yaji, V.G., and Bhatnagar, S., Analysis of Stochastic Approximation Schemes With Set-Valued Maps in the Absence of a Stability Guarantee and Their Stabilization; *TAC March 2020 1100-1115*
- Yam, S.C.P., see Bensoussan, A., TAC Jan. 2020 12-27
- Yan, J., see Liu, H., TAC Sept. 2020 3895-3902
- Yan, L., see Fei, C., TAC July 2020 2899-2912
- Yan, S., Shen, M., Nguang, S.K., and Zhang, G., Event-Triggered H_∞ Control of Networked Control Systems With Distributed Transmission Delay; *TAC Oct.* 2020 4295-4301
- Yan, Y., see Zhang, C., TAC May 2020 2185-2191
- Yan, Y., Su, L., Gupta, V., and Antsaklis, P., Analysis of Two-Dimensional Feedback Systems Over Networks Using Dissipativity; *TAC Aug. 2020 3241-3255*
- Yang, C., see Du, C., TAC March 2020 955-969
- Yang, C., see Li, F., TAC May 2020 2163-2170
- Yang, G., see An, L., TAC March 2020 1234-1241
- Yang, G., see Zhang, C., TAC March 2020 1340-1347
- Yang, G., see Lu, A., TAC Aug. 2020 3471-3485
- Yang, G., see Shi, C., TAC Dec. 2020 5503-5509
- Yang, G., see Lu, A., TAC Sept. 2020 3911-3918
- Yang, H., Li, P., Xia, Y., and Zhang, J., Reduced-Order H_∞ Filter Design for Delta Operator Systems Over Multiple Frequency Intervals; *TAC Dec. 2020* 5376-5383
- Yang, J., Li, T., Liu, C., Li, S., and Chen, W., Nonlinearity Estimator-Based Control of A Class of Uncertain Nonlinear Systems; *TAC May 2020 2230-2236*
- Yang, J., see Zhang, C., TAC May 2020 2185-2191
- Yang, J., see Jiang, X., TAC Dec. 2020 5399-5406
- Yang, L., see Tao, J., TAC Oct. 2020 4047-4060
- Yang, Q., see Chen, G., TAC Nov. 2020 4914-4921
- Yang, X., see Zheng, X., TAC March 2020 1310-1317
- Yang, X., and Scott, J.K., Accurate Uncertainty Propagation for Discrete-Time Nonlinear Systems Using Differential Inequalities With Model Redundancy; *TAC Dec. 2020 5043-5057*
- Yang, X., see Erhardsson, T., TAC Nov. 2020 4840-4845
- Yang, Y., and Gao, Z., A New Method for Control Allocation of Aircraft Flight Control System; *TAC April 2020 1413-1428*
- Yang, Z., see Cheng, P., TAC Oct. 2020 4348-4355
- Yao, P., see Feng, H., TAC Nov. 2020 4957-4964
- Yau, S.S., see Wang, Z., TAC April 2020 1613-1624
- Yazdanpanah, M.J., see Badri, V., TAC Dec. 2020 5450-5455

- Ye, M., Liu, J., Wang, L., Anderson, B.D.O., and Cao, M., Consensus and Disagreement of Heterogeneous Belief Systems in Influence Networks; *TAC Nov. 2020 4679-4694*
- Yi, J., Chai, L., and Zhang, J., Average Consensus by Graph Filtering: New Approach, Explicit Convergence Rate, and Optimal Design; *TAC Jan. 2020* 191-206
- Yin, G., see Liang, S., TAC April 2020 1785-1791
- Yin, G., see Liang, S., TAC Jan. 2020 347-353
- Yin, X., and Li, S., Synthesis of Dynamic Masks for Infinite-Step Opacity; TAC April 2020 1429-1441
- Yin, X., Yue, D., and Chen, Z., Asymptotic Behavior and Collision Avoidance in the Cucker–Smale Model; *TAC July 2020 3112-3119*
- Yin, X., Zhang, Q., Wang, H., and Ding, Z., RBFNN-Based Minimum Entropy Filtering for a Class of Stochastic Nonlinear Systems; *TAC Jan. 2020 376-381*
- Yonezawa, H., see Wang, Y., TAC Nov. 2020 4632-4647
- You, K., see Zhang, J., TAC June 2020 2494-2509
- You, X., Hua, C., Li, K., and Jia, X., Fixed-Time Leader-Following Consensus for High-Order Time-Varying Nonlinear Multiagent Systems; *TAC Dec.* 2020 5510-5516
- Yu, C., Ljung, L., Wills, A., and Verhaegen, M., Constrained Subspace Method for the Identification of Structured State-Space Models (COSMOS); *TAC Oct.* 2020 4201-4214
- Yu, H., Chen, X., Chen, T., and Hao, F., Event-Triggered Bipartite Consensus for Multiagent Systems: A Zeno-Free Analysis; *TAC Nov. 2020 4866-4873*
- Yu, L., see Saadi, W., TAC June 2020 2700-2707
- Yu, M., see Hou, Y., TAC Aug. 2020 3584-3591
- Yu, M., Logic-Based Switching Control for Stabilization of Stochastic Feedforward Nonlinear Systems; TAC Oct. 2020 4408-4415
- Yu, P., see Haskell, W.B., TAC Jan. 2020 115-129
- Yu, X., Andersson, S.B., Zhou, N., and Cassandras, C.G., Scheduling Multiple Agents in a Persistent Monitoring Task Using Reachability Analysis; *TAC April 2020 1499-1513*
- Yu, X., see Zheng, G., TAC Dec. 2020 5456-5463
- Yu, X., see Qin, J., TAC Dec. 2020 5083-5098
- Yu, X., see Shi, X., TAC Nov. 2020 4874-4881
- Yuan, H., see Xu, H., TAC Nov. 2020 4793-4799
- Yuan, K., see Alghunaim, S.A., TAC Nov. 2020 4554-4567
- Yue, D., see Yin, X., TAC July 2020 3112-3119
- Yuksel, S., see Kawan, C., TAC June 2020 2466-2479
- Yuksel, S., see Dalkiran, N.A., TAC Nov. 2020 4710-4725
- Yuksel, S., see Saldi, N., TAC Jan. 2020 130-142

Z

- Zabala, Y.A., and Costa, O.L.V., A Detector-Based Approach for the Constrained Quadratic Control of Discrete-Time Markovian Jump Linear Systems; *TAC March 2020 1211-1217*
- Zaccarian, L., see Invernizzi, D., TAC Jan. 2020 453-460
- Zamani, M., see Lavaei, A., TAC Dec. 2020 5280-5295
- Zamora-Gomez, G.I., Zavala-Rio, A., Lopez-Araujo, D.J., Cruz-Zavala, E., and Nuno, E., Continuous Control for Fully Damped Mechanical Systems With Input Constraints: Finite-Time and Exponential Tracking; *TAC Feb.* 2020 882-889
- Zang, Y., see Hou, Y., TAC Aug. 2020 3584-3591
- Zanon, M., see Gros, S., TAC Feb. 2020 636-648
- Zarai, Y., see Ben Avraham, T., TAC March 2020 941-954
- Zare, A., Mohammadi, H., Dhingra, N.K., Georgiou, T.T., and Jovanovic, M.R., Proximal Algorithms for Large-Scale Statistical Modeling and Sensor/Actuator Selection; *TAC Aug. 2020 3441-3456*
- Zavala-Rio, A., see Zamora-Gomez, G.I., TAC Feb. 2020 882-889
- Zelazo, D., see Trinh, M.H., TAC June 2020 2339-2354
- Zeng, X., see Wei, Y., TAC April 2020 1800-1806
- Zhan, N., see Xue, B., TAC April 2020 1468-1483
- Zhang, B., Lim, C., Shi, P., Xie, S., and Deng, F., Stabilization of a Class of Nonlinear Systems With Random Disturbance via Intermittent Stochastic Noise; *TAC March 2020 1318-1324*

Xu, X., see Li, H., TAC Jan. 2020 207-222

- Zhang, B., see Sekar, S., TAC Nov. 2020 4600-4615
- Zhang, C., and Yang, G., Event-Triggered Global Finite-Time Control for a Class of Uncertain Nonlinear Systems; *TAC March 2020 1340-1347*
- Zhang, C., Yang, J., Yan, Y., Fridman, L., and Li, S., Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes; *TAC May 2020 2185-2191*
- Zhang, G., Petersen, I.R., and Li, J., Structural Characterization of Linear Quantum Systems With Application to Back-Action Evading Measurement; *TAC* July 2020 3157-3163
- Zhang, G., see Yan, S., TAC Oct. 2020 4295-4301
- Zhang, H., see Meng, H., TAC April 2020 1683-1690
- Zhang, H., see Wang, T., TAC June 2020 2678-2685
- Zhang, H., see Gan, R., TAC Sept. 2020 3832-3846
- Zhang, J., see Ni, Y., TAC April 2020 1716-1723
- Zhang, J., and You, K., AsySPA: An Exact Asynchronous Algorithm for Convex Optimization Over Digraphs; *TAC June 2020 2494-2509*
- Zhang, J., Cong, S., Ling, Q., Li, K., and Rabitz, H., Quantum State Filter With Disturbance and Noise; *TAC July 2020 2856-2866*
- Zhang, J., see Ge, Z., TAC May 2020 2294-2299
- Zhang, J., see Yang, H., TAC Dec. 2020 5376-5383
- Zhang, J., see Carrasco, J., TAC Nov. 2020 4538-4553
- Zhang, J., Zhao, X., Zhu, F., and Karimi, H.R., Reduced-Order Observer Design for Switched Descriptor Systems With Unknown Inputs; *TAC Jan.* 2020 287-294
- Zhang, J., see Yi, J., TAC Jan. 2020 191-206
- Zhang, K., see Liu, X., TAC April 2020 1676-1682
- Zhang, K., and Johansson, K.H., Efficient Verification of Observability and Reconstructibility for Large Boolean Control Networks With Special Structures; *TAC Dec. 2020 5144-5158*
- Zhang, L., see Cai, B., TAC Jan. 2020 442-449
- Zhang, L., see Ning, Z., TAC Jan. 2020 159-174
- Zhang, P., see Zhang, Z., TAC Jan. 2020 434-441
- Zhang, Q., Ljung, L., and Pintelon, R., On Local LTI Model Coherence for LPV Interpolation; *TAC Aug. 2020 3671-3676*
- Zhang, Q., see Yin, X., TAC Jan. 2020 376-381
- Zhang, R., and Cai, K., Supervisor Localization of Timed Discrete-Event Systems Under Partial Observation; TAC Jan. 2020 295-301
- Zhang, W., and Li, J., Analyzing Controllability of Bilinear Systems on Symmetric Groups: Mapping Lie Brackets to Permutations; *TAC Nov. 2020* 4895-4901
- Zhang, X., An Optimal Data Fusion Algorithm in the Presence of Unknown Cross Covariances; *TAC March 2020 1226-1233*
- Zhang, X., Wang, Y., and Cheng, D., Output Tracking of Boolean Control Networks; TAC June 2020 2730-2735
- Zhang, X., see Li, F., TAC May 2020 2163-2170
- Zhang, X., see Lin, W., TAC Aug. 2020 3317-3332
- Zhang, Y., and Yagan, O., Robustness of Interdependent Cyber-Physical Systems Against Cascading Failures; *TAC Feb. 2020 711-726*
- Zhang, Y., see Sun, H., TAC Aug. 2020 3631-3638
- Zhang, Y., Zhu, M., Li, D., and Wang, J., ADRC Dynamic Stabilization of an Unstable Heat Equation; *TAC Oct. 2020 4424-4429*
- Zhang, Z., Zheng, L., Qiu, T., and Deng, F., Varying-Parameter Convergent-Differential Neural Solution to Time-Varying Overdetermined System of Linear Equations; *TAC Feb. 2020 874-881*
- Zhang, Z., see Wang, Z., TAC April 2020 1613-1624
- Zhang, Z., see Jiang, X., TAC Dec. 2020 5399-5406
- Zhang, Z., Leifeld, T., and Zhang, P., Reduced-Order Observer Design for Boolean Control Networks; *TAC Jan. 2020 434-441*
- Zhao, C., He, J., and Wang, Q., Resilient Distributed Optimization Algorithm Against Adversarial Attacks; *TAC Oct. 2020 4308-4315*
- Zhao, D., Qiu, L., and Gu, G., Stabilization of Two-Port Networked Systems With Simultaneous Uncertainties in Plant, Controller, and Communication Channels; *TAC March* 2020 1160-1175
- Zhao, J., and Iwasaki, T., Orbital Stability Analysis for Perturbed Nonlinear Systems and Natural Entrainment via Adaptive Andronov–Hopf Oscillator; *TAC Jan. 2020 87-101*

- Zhao, P., Mohan, S., and Vasudevan, R., Optimal Control of Polynomial Hybrid Systems via Convex Relaxations; *TAC May 2020 2062-2077*
- Zhao, P., see Mao, Y., TAC Sept. 2020 3847-3862
- Zhao, S., see Uribe-Murcia, K.J., TAC May 2020 2155-2162
- Zhao, X., see Fei, Z., TAC July 2020 3120-3127
- Zhao, X., see Cheng, J., TAC Nov. 2020 4816-4823
- Zhao, X., see Zhang, J., TAC Jan. 2020 287-294
- Zhao, Y., see Wang, T., TAC June 2020 2678-2685
- Zhao, Y., see Li, H., TAC Jan. 2020 207-222
- Zheng, G., see Saadi, W., TAC June 2020 2700-2707
- Zheng, G., Xiong, J., Yu, X., and Xu, C., Stabilization for Infinite-Dimensional Switched Linear Systems; *TAC Dec. 2020 5456-5463*
- Zheng, G., see Song, C., TAC Nov. 2020 4824-4831
- Zheng, L., see Zhang, Z., TAC Feb. 2020 874-881
- Zheng, L., see Sekar, S., TAC Nov. 2020 4600-4615
- Zheng, W.X., see Zhu, Y., TAC May 2020 2177-2184
- Zheng, W.X., see Zhu, Y., TAC Aug. 2020 3714-3721
- Zheng, W.X., see Gan, R., TAC Sept. 2020 3832-3846
- Zheng, W.X., see Fang, C., TAC Sept. 2020 3927-3934
- Zheng, X., and Yang, X., Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty; *TAC March 2020 1310-1317*
- Zheng, Y., see Sootla, A., TAC July 2020 3170-3175
- Zheng, Z., see Zhu, B., TAC May 2020 2223-2229
- Zhong, M., Ding, S.X., Zhou, D., and He, X., An H_i/H_∞ Optimization Approach to Event-Triggered Fault Detection for Linear Discrete Time Systems; *TAC* Oct. 2020 4464-4471
- Zhong, S., see Liu, X., TAC June 2020 2686-2692
- Zhou, D., see Zou, L., TAC Dec. 2020 5368-5375
- Zhou, D., see Zhong, M., TAC Oct. 2020 4464-4471
- Zhou, H., Guo, B., and Xiang, S., Performance Output Tracking for Multidimensional Heat Equation Subject to Unmatched Disturbance and Noncollocated Control; *TAC May 2020 1940-1955*
- Zhou, J., Wang, X., Mou, S., and Anderson, B.D.O., Finite-Time Distributed Linear Equation Solver for Solutions With Minimum *l*₁-Norm; *TAC April* 2020 1691-1696
- Zhou, M., see Huang, M., TAC April 2020 1397-1412
- Zhou, M., see Luo, J., TAC Jan. 2020 397-403
- Zhou, N., see Yu, X., TAC April 2020 1499-1513
- Zhou, X., Dall'Anese, E., and Chen, L., Online Stochastic Optimization of Networked Distributed Energy Resources; *TAC June 2020 2387-2401*
- Zhu, B., On the Well-Posedness of a Parametric Spectral Estimation Problem and Its Numerical Solution; TAC March 2020 1089-1099
- Zhu, B., Zheng, Z., and Xia, X., Constrained Adaptive Model-Predictive Control for a Class of Discrete-Time Linear Systems With Parametric Uncertainties; *TAC May 2020 2223-2229*
- Zhu, F., see Zhang, J., TAC Jan. 2020 287-294
- Zhu, G., see Lhachemi, H., TAC March 2020 1248-1255
- Zhu, G., see Ma, Z., TAC June 2020 2662-2669
- Zhu, L., see Khan, G.D., TAC Aug. 2020 3592-3599
- Zhu, L., and Hill, D.J., Synchronization of Kuramoto Oscillators: A Regional Stability Framework; TAC Dec. 2020 5070-5082
- Zhu, M., see Kim, H., TAC Nov. 2020 4887-4894
- Zhu, M., see Zhang, Y., TAC Oct. 2020 4424-4429
- Zhu, Q., see Tanwani, A., TAC Aug. 2020 3286-3301
- Zhu, Q., see Wang, B., TAC Dec. 2020 5415-5421
- Zhu, Q., see Wang, H., TAC Oct. 2020 4448-4455
- Zhu, Q., see Chen, J., TAC Oct. 2020 4385-4392
- Zhu, S., Lu, J., and Liu, Y., Asymptotical Stability of Probabilistic Boolean Networks With State Delays; TAC April 2020 1779-1784
- Zhu, Y., and Zheng, W.X., Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints; *TAC May 2020 2177-2184*
- Zhu, Y., and Zheng, W.X., Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy; *TAC Aug. 2020* 3714-3721

5543

- Zhu, Y., Krstic, M., and Su, H., Predictor Feedback for Uncertain Linear Systems With Distributed Input Delays; *TAC Dec. 2020 5344-5351*
- Zibaeenejad, M.H., and Liu, J., Auditor Product and Controller Synthesis for Nondeterministic Transition Systems With Practical LTL Specifications; *TAC Oct. 2020 4281-4287*
- Zimenko, K., Polyakov, A., Efimov, D., and Perruquetti, W., Robust Feedback Stabilization of Linear MIMO Systems Using Generalized Homogenization; *TAC Dec. 2020 5429-5436*

Zong, G., see Qi, W., TAC Jan. 2020 361-368

- Zorzi, M., see Ciccone, V., TAC Dec. 2020 5130-5143
- Zou, L., Wang, Z., Hu, J., and Zhou, D., Moving Horizon Estimation With Unknown Inputs Under Dynamic Quantization Effects; *TAC Dec. 2020* 5368-5375

Zou, Y., see Huang, B., TAC Feb. 2020 801-808

- Zuo, S., Lewis, F.L., and Davoudi, A., Resilient Output Containment of Heterogeneous Cooperative and Adversarial Multigroup Systems; *TAC July 2020* 3104-3111
- Zuo, Z., Defoort, M., Tian, B., and Ding, Z., Distributed Consensus Observer for Multiagent Systems With High-Order Integrator Dynamics; *TAC April* 2020 1771-1778

SUBJECT INDEX

А

Accelerometers

- Hybrid Nonlinear Observers for Inertial Navigation Using Landmark Measurements. Wang, M., +, TAC Dec. 2020 5173-5188
- Active disturbance rejection control
 - ADRC Dynamic Stabilization of an Unstable Heat Equation. Zhang, Y, +, TAC Oct. 2020 4424-4429

Matched Disturbance Rejection for a Class of Nonlinear Systems. *Ferguson*, J., +, *TAC April 2020 1710-1715*

Actuators

- Actuator Security Indices Based on Perfect Undetectability: Computation, Robustness, and Sensor Placement. *Milosevic*, J., +, *TAC Sept. 2020 3816-3831*
- Adaptive Control for a Class of Multi-Input Multi-Output Plants With Arbitrary Relative Degree. Qu, Z., +, TAC July 2020 3023-3038
- An Improved Homogeneous Polynomial Approach for Adaptive Sliding-Mode Control of Markov Jump Systems With Actuator Faults. Du, C., +, TAC March 2020 955-969
- Continuous Control for Fully Damped Mechanical Systems With Input Constraints: Finite-Time and Exponential Tracking. Zamora-Gomez, G.I., +, TAC Feb. 2020 882-889
- Predictor Feedback for Uncertain Linear Systems With Distributed Input Delays. *Zhu*, *Y*., +, *TAC Dec. 2020 5344-5351*
- Proximal Algorithms for Large-Scale Statistical Modeling and Sensor/Actuator Selection. Zare, A., +, TAC Aug. 2020 3441-3456
- Spacecraft Attitude Control With Nonconvex Constraints: An Explicit Reference Governor Approach. Nicotra, M.M., +, TAC Aug. 2020 3677-3684 Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984

Adaptive algorithms

A New Varying-Gain-Exponent-Based Differentiator/Observer: An Efficient Balance Between Linear and Sliding-Mode Algorithms. *Ghanes, M.*, +, *TAC Dec. 2020 5407-5414*

Adaptive control

- "Class-Type" Identification-Based Internal Models in Multivariable Nonlinear Output Regulation. *Bin, M.,* +, *TAC Oct. 2020 4369-4376*
- Adaptive Control by Regulation-Triggered Batch Least Squares. *Karafyllis, I.*, +, *TAC July 2020 2842-2855*
- Adaptive Error Feedback Regulator Design for One-Dimensional Heat Equation With Unknown Harmonic Disturbance Anticollocated With Control. *Guo*, *W*, +, *TAC Feb. 2020 824-830*
- Adaptive Event-Triggered Control of Nonlinear Systems With Controller and Parameter Estimator Triggering. *Huang, J.*, +, *TAC Jan. 2020 318-324*

- Adaptive Semiglobal Nonlinear Output Regulation: An Extended-State Observer Approach. *Wang, L., +, TAC June 2020 2670-2677*
- An Improved Homogeneous Polynomial Approach for Adaptive Sliding-Mode Control of Markov Jump Systems With Actuator Faults. Du, C., +, TAC March 2020 955-969
- An Iterative Learning Control Algorithm With Gain Adaptation for Stochastic Systems. Shen, D., +, TAC March 2020 1280-1287
- Barrier Function-Based Adaptive Super-Twisting Controller. Obeid, H., +, TAC Nov. 2020 4928-4933
- Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty. *Zheng, X.*, +, *TAC March 2020 1310-1317*
- Constrained Adaptive Model-Predictive Control for a Class of Discrete-Time Linear Systems With Parametric Uncertainties. *Zhu, B., +, TAC May 2020* 2223-2229
- Delay-Tolerant Adaptive Robust Tracking Control of Uncertain Time-Delay Systems. Nandiganahalli, J.S., +, TAC Feb. 2020 695-710
- Distributed Leader–Follower Affine Formation Maneuver Control for High-Order Multiagent Systems. Chen, L., +, TAC Nov. 2020 4941-4948
- Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads. *Kim, H.,* +, *TAC Nov. 2020 4887-4894*
- Dynamic Modularity Approach to Adaptive Control of Robotic Systems With Closed Architecture. *Wang, H.,*+, *TAC June 2020 2760-2767*
- Event-Triggered Adaptive Control for a Class of Nonlinear Systems With Unknown Control Direction and Sensor Faults. *Wang, C.*, +, *TAC Feb.* 2020 763-770
- Event-Triggered Global Finite-Time Control for a Class of Uncertain Nonlinear Systems. Zhang, C., +, TAC March 2020 1340-1347
- Extremum Seeking Control With Input Dead-Zone. Shao, G., +, TAC July 2020 3184-3190
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*
- Inverse Open-Loop Noncooperative Differential Games and Inverse Optimal Control. *Molloy, T.L.*, +, *TAC Feb. 2020 897-904*
- Leader-Following Consensus for a Class of Multiple Robot Manipulators over Switching Networks by Distributed Position Feedback Control. *He*, *C.*, +, *TAC Feb. 2020 890-896*
- Leaderless Synchronization of Heterogeneous Oscillators by Adaptively Learning the Group Model. *Baldi, S., +, TAC Jan. 2020 412-418*
- Nonlinearity Estimator-Based Control of A Class of Uncertain Nonlinear Systems. *Yang, J.*, +, *TAC May 2020 2230-2236*
- Orbital Stability Analysis for Perturbed Nonlinear Systems and Natural Entrainment via Adaptive Andronov–Hopf Oscillator. *Zhao, J.*, +, *TAC Jan. 2020 87-101*
- Peaking Attenuation of High-Gain Observers Using Adaptive Techniques: State Estimation and Feedback Control. *Shakarami, M.*, +, *TAC Oct. 2020* 4215-4229
- Predictor Feedback for Uncertain Linear Systems With Distributed Input Delays. *Zhu, Y.*, +, *TAC Dec. 2020 5344-5351*
- Realization of Reachability for the Control of a Class of Nonlinear Systems. Chai, Y., +, TAC March 2020 1073-1088
- Removing SPR-Like Conditions in Adaptive Feedforward Control of Uncertain Systems. *Wang, Y.*, +, *TAC June 2020 2309-2324*
- Self-Learning Optimal Regulation for Discrete-Time Nonlinear Systems Under Event-Driven Formulation. *Wang, D.*, +, *TAC March 2020 1272-1279*

Adaptive estimation

On Robust Parameter Estimation in Finite-Time Without Persistence of Excitation. Wang, J., +, TAC April 2020 1731-1738

Adaptive filters

An Adaptive Gaussian Sum Kalman Filter Based on a Partial Variational Bayesian Method. Xu, H., +, TAC Nov. 2020 4793-4799

Adaptive systems

Adaptive State-Feedback Stabilization of Stochastic High-Order Nonlinear Systems With Time-Varying Powers and Stochastic Inverse Dynamics. *Li*, *G.*, +, *TAC Dec. 2020 5360-5367*

Affine transforms

A Lyapunov-Like Characterization of Predefined-Time Stability. Jimenez-Rodriguez, E., +, TAC Nov. 2020 4922-4927

Aggregation

A Generalized Framework For Kullback–Leibler Markov Aggregation. Amjad, R.A., +, TAC July 2020 3068-3075

Aircraft control

- A Moving Target Defense Control Framework for Cyber-Physical Systems. Kanellopoulos, A., +, TAC March 2020 1029-1043
- A New Method for Control Allocation of Aircraft Flight Control System. Yang, Y., +, TAC April 2020 1413-1428
- Adaptive Control for a Class of Multi-Input Multi-Output Plants With Arbitrary Relative Degree. Qu, Z., +, TAC July 2020 3023-3038

Algebra

- A Tool for Analysis of Existence of Equilibria and Voltage Stability in Power Systems With Constant Power Loads. *Matveev, A.S.*, +, *TAC Nov. 2020* 4726-4740
- Event-Triggered Bipartite Consensus for Multiagent Systems: A Zeno-Free Analysis. Yu, H., +, TAC Nov. 2020 4866-4873
- Linear Hybrid Systems With Periodic Jumps: A Notion of Strong Observability and Strong Detectability. *Rios, H., +, TAC June 2020 2640-2646*

Angular velocity control

Regulation of Inhomogeneous Drilling Model With a P-I Controller. Terrand-Jeanne, A., +, TAC Jan. 2020 58-71

Approximation algorithms

Minimum Cost Feedback Selection in Structured Systems: Hardness and Approximation Algorithm. Joshi, A., +, TAC Dec. 2020 5517-5524

Approximation methods

Analytic Sensor Rules for Optimal Distributed Decision Given K-Out-of-L Fusion Rule Under Monte Carlo Approximation. Liao, Y, +, TAC Dec. 2020 5488-5495

Approximation theory

- A Proof on Equivalence of Stagewise Newton and Dreyfus's Successive Approximation Procedures. *Mizutani, E., TAC June 2020 2716-2723*
- A Universal Empirical Dynamic Programming Algorithm for Continuous State MDPs. *Haskell, W.B.*, +, *TAC Jan. 2020 115-129*
- Abstraction-Based Safety Verification and Control of Cooperative Vehicles at Road Intersections. Ahn, H., +, TAC Oct. 2020 4061-4074
- Analysis of Stochastic Approximation Schemes With Set-Valued Maps in the Absence of a Stability Guarantee and Their Stabilization. *Yaji, V.G.*, +, *TAC March 2020 1100-1115*
- Backstepping Control of Coupled Linear Parabolic PDEs With Space and Time Dependent Coefficients. *Kerschbaum, S.*, +, *TAC July 2020 3060-3067*
- Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty. *Zheng, X.*, +, *TAC March 2020 1310-1317*
- Computing Optimal Control of Cascading Failure in DC Networks. *Ba*, *Q*., +, *TAC June 2020 2402-2417*
- Design of a Quantum Projection Filter. Gao, Q., +, TAC Aug. 2020 3693-3700
- Distributed Coupled Multiagent Stochastic Optimization. Alghunaim, S.A., +, TAC Jan. 2020 175-190
- Distributed Stochastic Approximation Algorithm With Expanding Truncations. Lei, J., +, TAC Feb. 2020 664-679
- Extending the Best Linear Approximation Framework to the Process Noise Case. Schoukens, M., +, TAC April 2020 1514-1524
- Geometric Programming for Optimal Positive Linear Systems. Ogura, M., +, TAC Nov. 2020 4648-4663
- Gradient-Based Discrete-Time Concurrent Learning for Standalone Function Approximation. Djaneye-Boundjou, O., +, TAC Feb. 2020 749-756
- Graphon Control of Large-Scale Networks of Linear Systems. Gao, S., +, TAC Oct. 2020 4090-4105
- Higher Order Sliding Mode Control Using Discontinuous Integral Action. Cruz-Zavala, E., +, TAC Oct. 2020 4316-4323
- Identification of Linear Models From Quantized Data: A Midpoint-Projection Approach. *Risuleo, R.S.*, +, *TAC July 2020 2801-2813*

- Inner-Approximating Reachable Sets for Polynomial Systems With Time-Varying Uncertainties. *Xue, B., +, TAC April 2020 1468-1483*
- Koopman-Based Lifting Techniques for Nonlinear Systems Identification. Mauroy, A., +, TAC June 2020 2550-2565
- Lebesgue-Approximation Model Predictive Control of Nonlinear Sampled-Data Systems. *Tao, J.*, +, *TAC Oct. 2020 4047-4060*
- Linear Quadratic Mean Field Games: Asymptotic Solvability and Relation to the Fixed Point Approach. *Huang, M., +, TAC April 2020 1397-1412*
- Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints. *Zhu, Y*, +, *TAC May 2020 2177-2184*
- Near Optimality of Linear Strategies for Static Teams With "Big" Non-Gaussian Noise. Kulkarni, A.A., TAC Feb. 2020 534-545
- On the Well-Posedness of a Parametric Spectral Estimation Problem and Its Numerical Solution. *Zhu, B., TAC March 2020 1089-1099*
- Optimal Continuous-Discrete Linear Filter and Moment Equations for Nonlinear Diffusions. *Cacace, F*, +, *TAC Oct. 2020 3961-3976*
- Performance Guarantees for Model-Based Approximate Dynamic Programming in Continuous Spaces. *Beuchat, P.N.*, +, *TAC Jan. 2020 143-158*
- Proper Orthogonal Decomposition Method to Nonlinear Filtering Problems in Medium-High Dimension. *Wang*, Z., +, *TAC April 2020 1613-1624*
- Protocol-Based Unscented Kalman Filtering in the Presence of Stochastic Uncertainties. *Liu, S.,* +, *TAC March 2020 1303-1309*
- Random Directions Stochastic Approximation With Deterministic Perturbations. Prashanth, L.A., +, TAC June 2020 2450-2465
- SI-ADMM: A Stochastic Inexact ADMM Framework for Stochastic Convex Programs. Xie, Y., +, TAC June 2020 2355-2370
- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984
- Stochastic Artificial Potentials for Online Safe Navigation. Paternain, S., +, TAC May 2020 1985-2000
- Stochastic Control Framework for Determining Feasible Alternatives in Sampling Allocation. *Peng, Y.*, +, *TAC June 2020 2647-2653*
- Two-Dimensional Frequency-Domain System Identification. Wang, X., +, TAC Feb. 2020 577-590
- Uniting Observers. *Astolfi*, D., +, *TAC July 2020 2867-2882* Asymptotic stability
 - A Note on Uniform Exponential Stability of Linear Periodic Time-Varying Systems. Vrabel, R., TAC April 2020 1647-1651
 - A Robust Asymptotic Observer for Systems That Converge to Unobservable States—A Batch Reactor Case Study. *Rapaport, A.*, +, *TAC June 2020* 2693-2699
 - A Switching Controller for a Class of MIMO Bilinear Systems With Time Delay. *Sanchez, T.,* +, *TAC May 2020 2250-2256*
 - Adaptive Control by Regulation-Triggered Batch Least Squares. *Karafyllis, I.*, +, *TAC July 2020 2842-2855*
 - Adding Integral Action for Open-Loop Exponentially Stable Semigroups and Application to Boundary Control of PDE Systems. *Terrand-Jeanne*, *A.*, +, *TAC Nov. 2020 4481-4492*
 - ADRC Dynamic Stabilization of an Unstable Heat Equation. Zhang, Y, +, TAC Oct. 2020 4424-4429
 - Almost Global Stability of Nonlinear Switched Systems With Time-Dependent Switching. Karabacak, O., +, TAC July 2020 2969-2978
 - An LMI Approach to Stability Analysis of Coupled Parabolic Systems. Wakaiki, M., TAC Jan. 2020 404-411
 - Asymptotic Stability Analysis of Discrete-Time Switched Cascade Nonlinear Systems With Delays. *Liu*, *X.*, +, *TAC June 2020 2686-2692*
 - Asymptotical Stability of Probabilistic Boolean Networks With State Delays. Zhu, S., +, TAC April 2020 1779-1784
 - Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
 - Backstepping Control of Coupled Linear Parabolic PDEs With Space and Time Dependent Coefficients. *Kerschbaum, S.*, +, *TAC July 2020 3060-3067*
 - Cascades-Based Leader–Follower Formation Tracking and Stabilization of Multiple Nonholonomic Vehicles. *Maghenem, M.A.*, +, *TAC Aug. 2020* 3639-3646

- Continuous-Time Integral Dynamics for a Class of Aggregative Games With Coupling Constraints. *De Persis*, C., +, *TAC May 2020 2171-2176*
- Contraction Analysis of Monotone Systems via Separable Functions. Kawano, Y., +, TAC Aug. 2020 3486-3501
- Correction to the Paper "A Robust IDA-PBC Approach for Handling Uncertainties in Underactuated Mechanical Systems" [Oct 18 3495-3502]. *Donaire, A., +, TAC July 2020 3223-3226*
- Delayed and Switched Control of Formations on a Line Segment: Delays and Switches Do Not Matter. *Aleksandrov, A.*, +, *TAC Feb. 2020 794-800*
- Detectability and Uniform Global Asymptotic Stability in Switched Nonlinear Time-Varying Systems. *Lee, T., +, TAC May 2020 2123-2138*
- Event-Triggered Global Finite-Time Control for a Class of Uncertain Nonlinear Systems. Zhang, C., +, TAC March 2020 1340-1347
- Event-Triggered Stabilization for Continuous-Time Stochastic Systems. *Li*, *F*, +, *TAC Oct. 2020 4031-4046*
- Exponential Stabilization of Port-Hamiltonian Boundary Control Systems via Energy Shaping. *Macchelli, A., +, TAC Oct. 2020 4440-4447*
- Extremum Seeking Control With Input Dead-Zone. Shao, G., +, TAC July 2020 3184-3190
- Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning. Umlauft, J., +, TAC Oct. 2020 4154-4169
- Fredholm Backstepping Control of Coupled Linear Parabolic PDEs With Input and Output Delays. *Deutscher*, J., +, *TAC July 2020 3128-3135*
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*
- Global Stabilization of Uncertain Lotka–Volterra Systems via Positive Nonlinear State Feedback. *Badri, V.*, +, *TAC Dec. 2020 5450-5455*
- Guaranteeing Global Asymptotic Stability and Prescribed Transient and Steady-State Attributes via Uniting Control. *Kanakis, G.S.*, +, *TAC May* 2020 1956-1968
- Hankel Singular Values and LQG Characteristic Values of Discrete-Time Linear Systems in Cascade With Inner Systems. Bucolo, M., +, TAC Nov. 2020 4989-4994
- Hybrid Control for Robust and Global Tracking on Smooth Manifolds. Casau, P., +, TAC May 2020 1870-1885
- Hybrid Systems With Delayed Jumps: Asymptotic Stability via Robustness and Lyapunov Conditions. *Altin, B., +, TAC Aug. 2020 3381-3396*
- Hybrid Systems With State-Triggered Jumps: Sensitivity-Based Stability Analysis With Application to Trajectory Tracking. *Rijnen, M.*, +, *TAC Nov.* 2020 4568-4583
- Logic-Based Switching Control for Stabilization of Stochastic Feedforward Nonlinear Systems. Yu, M., TAC Oct. 2020 4408-4415
- Lyapunov Criterion for Stochastic Systems and Its Applications in Distributed Computation. *Qin*, *Y*, +, *TAC Feb. 2020 546-560*
- Lyapunov Stability for Impulsive Systems via Event-Triggered Impulsive Control. Li, X., +, TAC Nov. 2020 4908-4913
- Matched Disturbance Rejection for a Class of Nonlinear Systems. *Ferguson*, J., +, *TAC April 2020 1710-1715*
- Multilevel Power-Imbalance Allocation Control for Secondary Frequency Control of Power Systems. Xi, K., +, TAC July 2020 2913-2928
- Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints. *Zhu*, *Y*, +, *TAC May 2020 2177-2184*
- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y.*, +, *TAC Aug. 2020 3714-3721*
- On Algebraic Proofs of Stability for Homogeneous Vector Fields. *Ahmadi, A.A.*, +, *TAC Jan. 2020 325-332*
- On Boundedness of Error Covariances for Kalman Consensus Filtering Problems. Li, W., +, TAC June 2020 2654-2661
- On Event-Triggered Control of Nonlinear Stochastic Systems. *Luo*, S., +, *TAC Jan. 2020 369-375*
- On the Stabilization of an Overhead Crane System With Dynamic and Delayed Boundary Conditions. *Chentouf, B.,* +, *TAC Oct. 2020 4273-4280*
- Orbital Stability Analysis for Perturbed Nonlinear Systems and Natural Entrainment via Adaptive Andronov–Hopf Oscillator. Zhao, J., +, TAC Jan. 2020 87-101

- Performance Output Tracking for Multidimensional Heat Equation Subject to Unmatched Disturbance and Noncollocated Control. *Zhou, H.*, +, *TAC May 2020 1940-1955*
- Periodic Event-Triggered Control for Nonlinear Networked Control Systems. Wang, W., +, TAC Feb. 2020 620-635
- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, D., +, *TAC May 2020 2300-2307*
- Regulation of Inhomogeneous Drilling Model With a P-I Controller. Terrand-Jeanne, A., +, TAC Jan. 2020 58-71
- Robust Economic Model Predictive Control of Continuous-Time Epidemic Processes. *Watkins, N.J.*, +, *TAC March 2020 1116-1131*
- Set Membership Identification of Linear Systems With Guaranteed Simulation Accuracy. Lauricella, M., +, TAC Dec. 2020 5189-5204
- Stability Analysis for a Class of Linear 2 × 2 Hyperbolic PDEs Using a Backstepping Transform. *Bou Saba*, *D.*, +, *TAC July 2020 2941-2956*
- Stability Analysis of Dissipative Systems Subject to Nonlinear Damping via Lyapunov Techniques. Marx, S., +, TAC May 2020 2139-2146
- Stability Analysis of Linear Partial Differential Equations With Generalized Energy Functions. *Gahlawat*, A., +, *TAC May 2020 1924-1939*
- Stability and Stabilization of Infinite Delay Systems: A Lyapunov-Based Approach. Xu, X., +, TAC Nov. 2020 4509-4524
- Stabilization of Highly Nonlinear Hybrid Systems by Feedback Control Based on Discrete-Time State Observations. *Fei, C.*, +, *TAC July 2020* 2899-2912
- Stabilization of Switched Linear Systems Subject to Actuator Saturation via Invariant Semiellipsoids. *Lian, J.*, +, *TAC Oct. 2020 4332-4339*
- Switched Systems With Multiple Equilibria Under Disturbances: Boundedness and Practical Stability. Veer, S., +, TAC June 2020 2371-2386
- The Implicit Discretization of the Supertwisting Sliding-Mode Control Algorithm. *Brogliato, B., +, TAC Aug. 2020 3707-3713*
- Trajectory-Constrained Collective Circular Motion With Different Phase Arrangements. Jain, A., +, TAC May 2020 2237-2244
- When Is a Nonlinear System Semiglobally Asymptotically Stabilizable by Digital Feedback?. *Lin, W., TAC Nov. 2020 4584-4599*

Attenuation

Combining Pontryagin's Principle and Dynamic Programming for Linear and Nonlinear Systems. Sassano, M., +, TAC Dec. 2020 5312-5327

Attitude control

- A Common Framework for Complete and Incomplete Attitude Synchronization in Networks With Switching Topology. *Pereira*, *P.O.*, +, *TAC Jan.* 2020 271-278
- Dynamic Attitude Planning for Trajectory Tracking in Thrust-Vectoring UAVs. Invernizzi, D., +, TAC Jan. 2020 453-460
- Leader-Following Attitude Consensus of Multiple Rigid Spacecraft Systems Under Switching Networks. Lu, M., +, TAC Feb. 2020 839-845
- Model Predictive Tracking Control for Invariant Systems on Matrix Lie Groups via Stable Embedding Into Euclidean Spaces. *Chang, D.E.,* +, *TAC July 2020 3191-3198*
- Spacecraft Attitude Control With Nonconvex Constraints: An Explicit Reference Governor Approach. *Nicotra, M.M.*, +, *TAC Aug. 2020 3677-3684*

Automatic guided vehicles

Efficient Liveness Assessment for Traffic States in Open, Irreversible, Dynamically Routed, Zone-Controlled Guidepath-Based Transport Systems. *Reveliotis, S.*, +, *TAC July 2020 2883-2898*

Automation

Design of Supervisors for Active Diagnosis in Discrete Event Systems. *Hu*, *Y*, +, *TAC Dec. 2020 5159-5172*

Automobiles

- On the Chain Stability of Bilateral Control Model. Wang, L., +, TAC Aug. 2020 3397-3408
- On the Stability Analysis of Mixed Traffic With Vehicles Under Car-Following and Bilateral Control. Wang, L., +, TAC July 2020 3076-3083

Autonomous aerial vehicles

Dynamic Attitude Planning for Trajectory Tracking in Thrust-Vectoring UAVs. Invernizzi, D., +, TAC Jan. 2020 453-460

Autonomous systems

Corrections to "Stochastic Stability of Perturbed Learning Automata in Positive-Utility Games" [Nov 19 4454-4469]. Chasparis, G.C., TAC April 2020 1822

Autoregressive processes

Interval Error Correction Auxiliary Model Based Gradient Iterative Algorithms for Multirate ARX Models. Chen, J., +, TAC Oct. 2020 4385-4392 Remote Estimation Over a Packet-Drop Channel With Markovian State. Chakravorty, J., +, TAC May 2020 2016-2031

AWGN channels

Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907

R

Backstepping

Backstepping-Based Estimation of Thermoacoustic Oscillations in a Riike Tube With Experimental Validation. de Andrade, G.A., +, TAC Dec. 2020 5336-5343

Batch processing (industrial)

A Robust Asymptotic Observer for Systems That Converge to Unobservable States-A Batch Reactor Case Study. Rapaport, A., +, TAC June 2020 2693-2699

Bayes methods

- An Adaptive Gaussian Sum Kalman Filter Based on a Partial Variational Bayesian Method. Xu, H., +, TAC Nov. 2020 4793-4799
- Analytic Sensor Rules for Optimal Distributed Decision Given K-Out-of-L Fusion Rule Under Monte Carlo Approximation. Liao, Y., +, TAC Dec. 2020 5488-5495
- Distributed Learning Over Networks: Effect of Using Historical Observations. Shi, C., +, TAC Dec. 2020 5503-5509
- Interaction-Based Distributed Learning in Cyber-Physical and Social Networks. Sasso, F., +, TAC Jan. 2020 223-236
- Posterior Sampling-Based Reinforcement Learning for Control of Unknown Linear Systems. Ouyang, Y., +, TAC Aug. 2020 3600-3607
- State Estimation for Stochastic Time-Varying Boolean Networks. Chen, H., +, TAC Dec. 2020 5480-5487
- Stochastic Control Framework for Determining Feasible Alternatives in Sampling Allocation. Peng, Y., +, TAC June 2020 2647-2653

Bifurcation

Orbital Stability Analysis for Perturbed Nonlinear Systems and Natural Entrainment via Adaptive Andronov-Hopf Oscillator. Zhao, J., +, TAC Jan. 2020 87-101

Bilinear systems

- A Switching Controller for a Class of MIMO Bilinear Systems With Time Delay. Sanchez, T., +, TAC May 2020 2250-2256
- Analyzing Controllability of Bilinear Systems on Symmetric Groups: Mapping Lie Brackets to Permutations. Zhang, W., +, TAC Nov. 2020 4895-4901
- Causality and Network Graph in General Bilinear State-Space Representations. Jozsa, M., +, TAC Aug. 2020 3623-3630
- Integral Input-to-State Stability of Networked Control Systems. Noroozi, N., +, TAC March 2020 1203-1210
- Sub-Riemannian Geodesics in $SU(n/S(U(n-1 \times U(1))))$ and Optimal Control of Three Level Quantum Systems. Albertini, F., +, TAC March 2020 1176-1191

Biochemistry

Adaptation Mechanisms in Phosphorylation Cycles By Allosteric Binding and Gene Autoregulation. Fang, Z., +, TAC Aug. 2020 3457-3470

Fundamental Limits and Tradeoffs in Autocatalytic Pathways. Siami, M., +, TAC Feb. 2020 733-740

Biofuel

A Robust Asymptotic Observer for Systems That Converge to Unobservable States-A Batch Reactor Case Study. Rapaport, A., +, TAC June 2020 2693-2699

Biological system modeling

State Estimation for Stochastic Time-Varying Boolean Networks. Chen, H., +, TAC Dec. 2020 5480-5487

Biomedical MRI

Smooth Interpolation of Covariance Matrices and Brain Network Estimation: Part II. Ning, L., TAC May 2020 1901-1910

Bioreactors

A Robust Asymptotic Observer for Systems That Converge to Unobservable States-A Batch Reactor Case Study. Rapaport, A., +, TAC June 2020 2693-2699

Boltzmann equation

Asymptotic Behavior and Collision Avoidance in the Cucker-Smale Model. Yin, X., +, TAC July 2020 3112-3119

Boolean algebra

Asymptotical Stability of Probabilistic Boolean Networks With State Delays. Zhu, S., +, TAC April 2020 1779-1784

Boolean functions

- Asymptotic Behavior of Conjunctive Boolean Networks Over Weakly Connected Digraphs. Chen, X., +, TAC June 2020 2536-2549
- Efficient Verification of Observability and Reconstructibility for Large Boolean Control Networks With Special Structures. Zhang, K., +, TAC Dec. 2020 5144-5158

Reduced-Order Observer Design for Boolean Control Networks. Zhang, Z., +, TAC Jan. 2020 434-441

State Estimation for Stochastic Time-Varying Boolean Networks. Chen, H., +, TAC Dec. 2020 5480-5487

Boundary conditions

Backstepping-Based Estimation of Thermoacoustic Oscillations in a Rijke Tube With Experimental Validation. de Andrade, G.A., +, TAC Dec. 2020 5336-5343

Boundary-value problems

Linear Quadratic Mean Field Games: Asymptotic Solvability and Relation to the Fixed Point Approach. Huang, M., +, TAC April 2020 1397-1412

Brain

Smooth Interpolation of Covariance Matrices and Brain Network Estimation: Part II. Ning, L., TAC May 2020 1901-1910

Brownian motion

- Semiexplicit Solutions to Some Nonlinear Nonquadratic Mean-Field-Type Games: A Direct Method. Barreiro-Gomez, J., +, TAC June 2020 2582-2597
- Stabilization of a Class of Nonlinear Systems With Random Disturbance via Intermittent Stochastic Noise. Zhang, B., +, TAC March 2020 1318-1324 Budgeting

Efficient Simulation Budget Allocation With Bound Information. Li, H., +, TAC Jan. 2020 207-222

С

Control of Nondeterministic Systems for Bisimulation Equivalence Under Partial Information. Farhat, H., TAC Dec. 2020 5437-5443

Capacitors

Calculus

Minimal Series-Parallel Network Realizations of Bicubic Impedances. Hughes, T.H., TAC Dec. 2020 4997-5011

Cascade systems

- A Dynamic Feedback Framework for Control of Time-Delay Nonlinear Systems With Unstable Zero Dynamics. Lin, W., +, TAC Aug. 2020 3317-3332
- Asymptotic Stability Analysis of Discrete-Time Switched Cascade Nonlinear Systems With Delays. Liu, X., +, TAC June 2020 2686-2692
- Cascading With Inner Systems: Hankel Singular Values and Characteristic Values. Buscarino, A., +, TAC Feb. 2020 727-732
- On the Stability Bounds of Kalman Filters for Linear Deterministic Discrete-Time Systems. Haring, M., +, TAC Oct. 2020 4434-4439
- Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs. Deutscher, J., +, TAC May 2020 2207-2214

Catalysis

Fundamental Limits and Tradeoffs in Autocatalytic Pathways. Siami, M., +, TAC Feb. 2020 733-740

Causality

Causality and Network Graph in General Bilinear State-Space Representations. Jozsa, M., +, TAC Aug. 2020 3623-3630

Cellular biophysics

Adaptation Mechanisms in Phosphorylation Cycles By Allosteric Binding and Gene Autoregulation. Fang, Z., +, TAC Aug. 2020 3457-3470

Channel allocation

Whittle Index Policy for Dynamic Multichannel Allocation in Remote State Estimation. *Wang, J.*, +, *TAC Feb. 2020 591-603*

Channel capacity

- Metric and Topological Entropy Bounds for Optimal Coding of Stochastic Dynamical Systems. *Kawan, C.*, +, *TAC June 2020 2466-2479*
- Stabilization of Nonlinear Dynamic Systems Over Limited Capacity Communication Channels. *Sanjaroon, V.*, +, *TAC Aug. 2020 3655-3662*

Channel coding

Stabilization of Nonlinear Dynamic Systems Over Limited Capacity Communication Channels. *Sanjaroon, V.*, +, *TAC Aug. 2020 3655-3662*

Channel estimation

Remote Estimation Over a Packet-Drop Channel With Markovian State. Chakravorty, J., +, TAC May 2020 2016-2031

Chebyshev approximation

Corrections to "Model Predictive Control for Stochastic Max-Plus Linear Systems With Chance Constraints,". *Boom, T.J.J.v.d.*, +, *TAC Feb. 2020* 905-906

Chemical reactors

Analysis of the Existence of Equilibrium Profiles in Nonisothermal Axial Dispersion Tubular Reactors. *Hastir, A.*, +, *TAC April 2020 1525-1536*

Circadian rhythms

Adaptation Mechanisms in Phosphorylation Cycles By Allosteric Binding and Gene Autoregulation. *Fang, Z.*, +, *TAC Aug. 2020 3457-3470*

Closed loop systems

- A Detector-Based Approach for the Constrained Quadratic Control of Discrete-Time Markovian Jump Linear Systems. Zabala, Y.A., +, TAC March 2020 1211-1217
- A Moving Target Defense Control Framework for Cyber-Physical Systems. Kanellopoulos, A., +, TAC March 2020 1029-1043
- A Partial-State Feedback Model Reference Adaptive Control Scheme. Song, G., +, TAC Jan. 2020 44-57
- A Switching Controller for a Class of MIMO Bilinear Systems With Time Delay. *Sanchez, T.,* +, *TAC May 2020 2250-2256*
- Adaptive Control by Regulation-Triggered Batch Least Squares. *Karafyllis, I.*, +, *TAC July 2020 2842-2855*
- Adaptive Control for a Class of Multi-Input Multi-Output Plants With Arbitrary Relative Degree. Qu, Z., +, TAC July 2020 3023-3038
- Adaptive Event-Triggered Control of Nonlinear Systems With Controller and Parameter Estimator Triggering. *Huang, J.*, +, *TAC Jan. 2020 318-324*
- Adaptive Semiglobal Nonlinear Output Regulation: An Extended-State Observer Approach. *Wang, L., +, TAC June 2020 2670-2677*
- Adding Integral Action for Open-Loop Exponentially Stable Semigroups and Application to Boundary Control of PDE Systems. *Terrand-Jeanne*, *A.*, +, *TAC Nov. 2020 4481-4492*
- ADRC Dynamic Stabilization of an Unstable Heat Equation. Zhang, Y., +, TAC Oct. 2020 4424-4429
- Analysis of Two-Dimensional Feedback Systems Over Networks Using Dissipativity. Yan, Y., +, TAC Aug. 2020 3241-3255
- Codesign of Event Trigger and Feedback Policy in Robust Model Predictive Control. *Liu*, *C.*, +, *TAC Jan. 2020 302-309*
- Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty. *Zheng*, *X*, +, *TAC March 2020 1310-1317*
- Constrained Adaptive Model-Predictive Control for a Class of Discrete-Time Linear Systems With Parametric Uncertainties. *Zhu, B., +, TAC May 2020* 2223-2229
- Continuous Control for Fully Damped Mechanical Systems With Input Constraints: Finite-Time and Exponential Tracking. Zamora-Gomez, G.I., +, TAC Feb. 2020 882-889
- Continuous Twisting Algorithm for Third-Order Systems. *Mendoza-Avila*, J., +, *TAC July 2020 2814-2825*
- Corrections to "Model Predictive Control for Stochastic Max-Plus Linear Systems With Chance Constraints,". *Boom, T.J.J.v.d.*, +, *TAC Feb. 2020* 905-906

- Data-Driven Economic NMPC Using Reinforcement Learning. Gros, S., +, TAC Feb. 2020 636-648
- Design of Supervisors for Active Diagnosis in Discrete Event Systems. *Hu*, *Y*, +, *TAC Dec. 2020 5159-5172*
- Dynamic Modularity Approach to Adaptive Control of Robotic Systems With Closed Architecture. *Wang*, *H.*, +, *TAC June 2020 2760-2767*
- Economic Model Predictive Control for Time-Varying Cost and Peak Demand Charge Optimization. *Risbeck, M.J.*, +, *TAC July 2020 2957-2968*
- Event-Triggered H_∞ Control of Networked Control Systems With Distributed Transmission Delay. Yan, S., +, TAC Oct. 2020 4295-4301
- Event-Triggered Adaptive Control for a Class of Nonlinear Systems With Unknown Control Direction and Sensor Faults. *Wang, C.*, +, *TAC Feb.* 2020 763-770
- Event-Triggered Dynamic Output Feedback Control for Switched Systems With Frequent Asynchronism. *Fei, Z., +, TAC July 2020 3120-3127*
- Event-Triggered Global Finite-Time Control for a Class of Uncertain Nonlinear Systems. Zhang, C., +, TAC March 2020 1340-1347
- Event-Triggered Stabilization for Continuous-Time Stochastic Systems. *Li*, *F*, +, *TAC Oct. 2020 4031-4046*
- Extending the Best Linear Approximation Framework to the Process Noise Case. Schoukens, M., +, TAC April 2020 1514-1524
- Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning. Umlauft, J., +, TAC Oct. 2020 4154-4169
- Finite-Time Sliding-Mode Control of Markovian Jump Cyber-Physical Systems Against Randomly Occurring Injection Attacks. Cao, Z., +, TAC March 2020 1264-1271
- Fredholm Backstepping Control of Coupled Linear Parabolic PDEs With Input and Output Delays. *Deutscher*, J., +, *TAC July 2020 3128-3135*
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*
- Guaranteeing Global Asymptotic Stability and Prescribed Transient and Steady-State Attributes via Uniting Control. *Kanakis, G.S.*, +, *TAC May* 2020 1956-1968
- Higher Order Sliding Mode Control Using Discontinuous Integral Action. Cruz-Zavala, E., +, TAC Oct. 2020 4316-4323
- Hybrid Systems With State-Triggered Jumps: Sensitivity-Based Stability Analysis With Application to Trajectory Tracking. *Rijnen, M.*, +, *TAC Nov.* 2020 4568-4583
- Integral Input-to-State Stability of Networked Control Systems. Noroozi, N., +, TAC March 2020 1203-1210
- Lebesgue-Approximation Model Predictive Control of Nonlinear Sampled-Data Systems. *Tao, J.*, +, *TAC Oct. 2020 4047-4060*
- Logic-Based Switching Control for Stabilization of Stochastic Feedforward Nonlinear Systems. Yu, M., TAC Oct. 2020 4408-4415
- Lyapunov Stability Analysis of the Implicit Discrete-Time Twisting Control Algorithm. *Huber, O., +, TAC June 2020 2619-2626*
- Matched Disturbance Rejection for a Class of Nonlinear Systems. *Ferguson, J.*, +, *TAC April 2020 1710-1715*
- Minimum Cost Feedback Selection in Structured Systems: Hardness and Approximation Algorithm. *Joshi, A.*, +, *TAC Dec. 2020 5517-5524*
- Model Matching and Passivation of MIMO Linear Systems via Dynamic Output Feedback and Feedforward. Sassano, M., +, TAC Oct. 2020 4016-4030
- Nonlinearity Estimator-Based Control of A Class of Uncertain Nonlinear Systems. *Yang, J.*, +, *TAC May 2020 2230-2236*
- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y.*, +, *TAC Aug. 2020 3714-3721*
- Observers and Disturbance Rejection Control for a Heat Equation. *Feng, H.*, +, *TAC Nov. 2020 4957-4964*
- On the Stabilization of an Overhead Crane System With Dynamic and Delayed Boundary Conditions. *Chentouf, B.,* +, *TAC Oct. 2020 4273-4280*
- Optimal Output Regulation for Square, Overactuated and Underactuated Linear Systems. *Bernhard, S.*, +, *TAC Oct. 2020 4416-4423*
- Optimality and Passivity of Input-Quadratic Nonlinear Systems. Sassano, M., +, TAC Aug. 2020 3229-3240

- Output Feedback Approximation-Free Prescribed Performance Tracking Control for Uncertain MIMO Nonlinear Systems. *Dimanidis, I.S.*, +, *TAC Dec. 2020 5058-5069*
- Output Tracking of Boolean Control Networks. *Zhang, X.*, +, *TAC June 2020* 2730-2735
- Performance Output Tracking for Multidimensional Heat Equation Subject to Unmatched Disturbance and Noncollocated Control. Zhou, H., +, TAC May 2020 1940-1955
- Performance Recovery of Dynamic Feedback-Linearization Methods for Multivariable Nonlinear Systems. *Wu*, *Y*, +, *TAC April 2020 1365-1380*
- Periodic Event-Triggered Control for Nonlinear Networked Control Systems. Wang, W., +, TAC Feb. 2020 620-635
- Positivity-Preserving Consensus of Homogeneous Multiagent Systems. *Liu*, J.J.R., +, *TAC June 2020 2724-2729*
- Realization of Reachability for the Control of a Class of Nonlinear Systems. Chai, Y., +, TAC March 2020 1073-1088
- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, D., +, *TAC May 2020 2300-2307*
- Regulation of Inhomogeneous Drilling Model With a P-I Controller. Terrand-Jeanne, A., +, TAC Jan. 2020 58-71
- Removing SPR-Like Conditions in Adaptive Feedforward Control of Uncertain Systems. Wang, Y., +, TAC June 2020 2309-2324
- Resilient Output Containment of Heterogeneous Cooperative and Adversarial Multigroup Systems. Zuo, S., +, TAC July 2020 3104-3111
- Robust Feedback Stabilization of Linear MIMO Systems Using Generalized Homogenization. Zimenko, K., +, TAC Dec. 2020 5429-5436
- Robust Motion Planning for Uncertain Systems With Disturbances Using the Invariant-Set Motion Planner. Danielson, C., +, TAC Oct. 2020 4456-4463
- Secure and Private Implementation of Dynamic Controllers Using Semihomomorphic Encryption. Murguia, C., +, TAC Sept. 2020 3950-3957
- Set-Valued Feedback Control and Its Application to Event-Triggered Sampled-Data Systems. *Jiang, Y.*, +, *TAC Nov. 2020 4965-4972*
- Signal Selection for Estimation and Identification in Networks of Dynamic Systems: A Graphical Model Approach. *Materassi, D.*, +, *TAC Oct. 2020* 4138-4153
- Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. Qi, W., +, TAC Jan. 2020 361-368
- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984
- Stabilization of Networked Control Systems Under DoS Attacks and Output Quantization. Wakaiki, M., +, TAC Aug. 2020 3560-3575
- Static Sliding Mode Control of Systems With Arbitrary Relative Degree by Using Artificial Delay. Xu, J., +, TAC Dec. 2020 5464-5471
- Stochastic Semistability for Nonlinear Dynamical Systems With Application to Consensus on Networks With Communication Uncertainty. *Haddad*, *W.M.*, +, *TAC July 2020 2826-2841*
- Structural Controller for Logical Expression of Linear Constraints on Petri Nets. Luo, J., +, TAC Jan. 2020 397-403
- Structured Feedback Synthesis for Stability and Performance of Switched Systems. *Chesi, G.*, +, *TAC Nov. 2020 4695-4709*
- The Implicit Discretization of the Supertwisting Sliding-Mode Control Algorithm. *Brogliato, B.,* +, *TAC Aug. 2020 3707-3713*

Collision avoidance

- Abstraction-Based Safety Verification and Control of Cooperative Vehicles at Road Intersections. Ahn, H., +, TAC Oct. 2020 4061-4074
- Asymptotic Behavior and Collision Avoidance in the Cucker–Smale Model. *Yin, X.*, +, *TAC July 2020 3112-3119*
- Efficient Liveness Assessment for Traffic States in Open, Irreversible, Dynamically Routed, Zone-Controlled Guidepath-Based Transport Systems. *Reveliotis, S.*, +, *TAC July 2020 2883-2898*
- Risk of Collision and Detachment in Vehicle Platooning: Time-Delay– Induced Limitations and Tradeoffs. *Somarakis, C.*, +, *TAC Aug. 2020* 3544-3559
- Robust Motion Planning for Uncertain Systems With Disturbances Using the Invariant-Set Motion Planner. Danielson, C., +, TAC Oct. 2020 4456-4463

Stochastic Artificial Potentials for Online Safe Navigation. Paternain, S., +, TAC May 2020 1985-2000

Combinatorial mathematics

- Collective Stochastic Discrete Choice Problems: A Min-LQG Dynamic Game Formulation. Salhab, R., +, TAC Aug. 2020 3302-3316
- Utility Design for Distributed Resource Allocation—Part I: Characterizing and Optimizing the Exact Price of Anarchy. *Paccagnan, D.*, +, *TAC Nov.* 2020 4616-4631

Combined source-channel coding

Metric and Topological Entropy Bounds for Optimal Coding of Stochastic Dynamical Systems. *Kawan, C., +, TAC June 2020 2466-2479* **Communication complexity**

Blind Learning of Tree Network Topologies in the Presence of Hidden

Nodes. Sepehr, F., +, TAC March 2020 1014-1028

Compensation

- Completely Decentralized Design of Distributed Observer for Linear Systems. *Kim, T.*, +, *TAC Nov. 2020 4664-4678*
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*

Complex networks

Graphon Control of Large-Scale Networks of Linear Systems. Gao, S., +, TAC Oct. 2020 4090-4105

Complexity theory

- Design of Supervisors for Active Diagnosis in Discrete Event Systems. *Hu*, *Y*, +, *TAC Dec. 2020 5159-5172*
- Minimal Series–Parallel Network Realizations of Bicubic Impedances. Hughes, T.H., TAC Dec. 2020 4997-5011

Computability

- Critical Observability for Automata and Petri Nets. Masopust, T., TAC Jan. 2020 341-346
- Linear Quadratic Mean Field Games: Asymptotic Solvability and Relation to the Fixed Point Approach. *Huang, M., +, TAC April 2020 1397-1412*

Novel All-Pass Factorization, All Solutions to Rational Matrix Equation and Control Application. *Stefanovski, J., TAC July 2020 3176-3183*

Computational complexity

- A Nonlinear Model Predictive Control Framework Using Reference Generic Terminal Ingredients. *Kohler, J.*, +, *TAC Aug. 2020 3576-3583*
- Actuator Security Indices Based on Perfect Undetectability: Computation, Robustness, and Sensor Placement. *Milosevic, J.*, +, *TAC Sept. 2020 3816-3831*
- An Integrative Perspective to LQ and ℓ_∞ Control for Delayed and Quantized Systems. *Nakahira, Y*, +, *TAC Nov. 2020 4781-4792*
- Analytic Sensor Rules for Optimal Distributed Decision Given K-Out-of-L Fusion Rule Under Monte Carlo Approximation. Liao, Y, +, TAC Dec. 2020 5488-5495
- Asymptotical Stability of Probabilistic Boolean Networks With State Delays. Zhu, S., +, TAC April 2020 1779-1784
- Auditor Product and Controller Synthesis for Nondeterministic Transition Systems With Practical LTL Specifications. *Zibaeenejad, M.H.*, +, *TAC Oct.* 2020 4281-4287
- Compositional and Abstraction-Based Approach for Synthesis of Edit Functions for Opacity Enforcement. *Mohajerani, S.*, +, *TAC Aug. 2020 3349-3364*
- Computing Optimal Control of Cascading Failure in DC Networks. Ba, Q., +, TAC June 2020 2402-2417
- Critical Observability for Automata and Petri Nets. Masopust, T., TAC Jan. 2020 341-346
- Deep Teams: Decentralized Decision Making With Finite and Infinite Number of Agents. *Arabneydi*, J., +, *TAC Oct. 2020 4230-4245*
- Distributed GNE Seeking Under Partial-Decision Information Over Networks via a Doubly-Augmented Operator Splitting Approach. *Pavel, L., TAC April 2020 1584-1597*
- Efficient Liveness Assessment for Traffic States in Open, Irreversible, Dynamically Routed, Zone-Controlled Guidepath-Based Transport Systems. *Revelicits, S.*, +, *TAC July 2020 2883-2898*
- Efficient Verification of Observability and Reconstructibility for Large Boolean Control Networks With Special Structures. *Zhang, K.*, +, *TAC Dec. 2020 5144-5158*
- Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning. Umlauft, J., +, TAC Oct. 2020 4154-4169

- Necessary and Sufficient Topological Conditions for Identifiability of Dynamical Networks. van Waarde, H.J., +, TAC Nov. 2020 4525-4537
- Proper Orthogonal Decomposition Method to Nonlinear Filtering Problems in Medium-High Dimension. *Wang*, Z., +, *TAC April 2020 1613-1624*
- Randomized Gradient-Free Distributed Optimization Methods for a Multiagent System With Unknown Cost Function. *Pang, Y.*, +, *TAC Jan. 2020 333-340*
- Reduced-Order H_{∞} Filter Design for Delta Operator Systems Over Multiple Frequency Intervals. *Yang, H.*, +, *TAC Dec. 2020 5376-5383*
- Remote State Estimation With Stochastic Event-Triggered Sensor Schedule and Packet Drops. Xu, L., +, TAC Nov. 2020 4981-4988
- Robust Motion Planning for Uncertain Systems With Disturbances Using the Invariant-Set Motion Planner. Danielson, C., +, TAC Oct. 2020 4456-4463
- Synthesis of Dynamic Masks for Infinite-Step Opacity. Yin, X., +, TAC April 2020 1429-1441
- Two-Dimensional Frequency-Domain System Identification. Wang, X., +, TAC Feb. 2020 577-590

Computational modeling

- Accurate Uncertainty Propagation for Discrete-Time Nonlinear Systems Using Differential Inequalities With Model Redundancy. *Yang, X.*, +, *TAC Dec. 2020 5043-5057*
- Efficient Verification of Observability and Reconstructibility for Large Boolean Control Networks With Special Structures. *Zhang, K.*, +, *TAC Dec. 2020 5144-5158*
- Learning Latent Variable Dynamic Graphical Models by Confidence Sets Selection. *Ciccone, V.,* +, *TAC Dec. 2020 5130-5143*

Computer network security

- A Moving Target Defense Control Framework for Cyber-Physical Systems. Kanellopoulos, A., +, TAC March 2020 1029-1043
- Novel Stealthy Attack and Defense Strategies for Networked Control Systems. Mao, Y., +, TAC Sept. 2020 3847-3862
- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y.*, +, *TAC Aug. 2020 3714-3721*
- Stealthy Actuator Signal Attacks in Stochastic Control Systems: Performance and Limitations. *Fang, C., +, TAC Sept. 2020 3927-3934*

Computerized monitoring

A Distributed Cyber-Attack Detection Scheme With Application to DC Microgrids. Gallo, A.J., +, TAC Sept. 2020 3800-3815

Concave programming

- Constrained Subspace Method for the Identification of Structured State-Space Models (COSMOS). Yu, C., +, TAC Oct. 2020 4201-4214
- Spacecraft Attitude Control With Nonconvex Constraints: An Explicit Reference Governor Approach. *Nicotra, M.M.*, +, *TAC Aug. 2020 3677-3684* Conjugate gradient methods
 - Riemannian Optimal Identification Method for Linear Systems With Symmetric Positive-Definite Matrix. Sato, K., +, TAC Nov. 2020 4493-4508

Consensus protocol

Fixed-Time Leader-Following Consensus for High-Order Time-Varying Nonlinear Multiagent Systems. You, X., +, TAC Dec. 2020 5510-5516

Constraint handling

An Explicit Reference Governor for the Intersection of Concave Constraints. Hosseinzadeh, M., +, TAC Jan. 2020 1-11

Constraint theory

A Distributed Continuous-Time Algorithm for Nonsmooth Constrained Optimization. Chen, G., +, TAC Nov. 2020 4914-4921

Continuous systems

- Continuous Twisting Algorithm for Third-Order Systems. *Mendoza-Avila*, J., +, *TAC July 2020 2814-2825*
- Higher Order Sliding Mode Control Using Discontinuous Integral Action. Cruz-Zavala, E., +, TAC Oct. 2020 4316-4323
- Hybrid Control for Robust and Global Tracking on Smooth Manifolds. Casau, P., +, TAC May 2020 1870-1885
- Hybrid Systems With Delayed Jumps: Asymptotic Stability via Robustness and Lyapunov Conditions. *Altin, B., +, TAC Aug. 2020 3381-3396*
- Local Controllability of Single-Input Nonlinear Systems Based on Deterministic Wiener Processes. *Nishimura, Y.*, +, *TAC Jan. 2020 354-360*

- Optimal Control of Polynomial Hybrid Systems via Convex Relaxations. Zhao, P., +, TAC May 2020 2062-2077
- Sensitivity to Cumulative Perturbations for a Class of Piecewise Constant Hybrid Systems. *Sharifnassab, A.,* +, *TAC March 2020 1057-1072*
- Switched Systems With Multiple Equilibria Under Disturbances: Boundedness and Practical Stability. *Veer, S.*, +, *TAC June 2020 2371-2386*

Continuous time systems

- A Distributed Continuous-Time Algorithm for Nonsmooth Constrained Optimization. Chen, G., +, TAC Nov. 2020 4914-4921
- A Reference Governor for Nonlinear Systems With Disturbance Inputs Based on Logarithmic Norms and Quadratic Programming. *Li*, *N.*, +, *TAC July 2020 3207-3214*
- A Simplified Approach to Analyze Complementary Sensitivity Tradeoffs in Continuous-Time and Discrete-Time Systems. *Wan, N.*, +, *TAC April 2020 1697-1703*
- Adaptive Event-Triggered Control of Nonlinear Systems With Controller and Parameter Estimator Triggering. *Huang, J.*, +, *TAC Jan. 2020 318-324*
- Almost Global Stability of Nonlinear Switched Systems With Time-Dependent Switching. *Karabacak, O., +, TAC July 2020 2969-2978*
- Analysis and Design of Continuous-Time Multivariable Periodic Controllers: An \mathcal{H}_{∞} /LTR-Based Approach. *Deshmukh*, A., +, TAC Aug. 2020 3608-3615
- Completely Decentralized Design of Distributed Observer for Linear Systems. *Kim, T.*, +, *TAC Nov. 2020 4664-4678*
- Continuous-Time Accelerated Methods via a Hybrid Control Lens. Kolarijani, A.S., +, TAC Aug. 2020 3425-3440
- Continuous-Time Integral Dynamics for a Class of Aggregative Games With Coupling Constraints. *De Persis, C.*, +, *TAC May 2020 2171-2176*
- Continuous-Time Model Identification From Filtered Sampled Data: Error Analysis. *Hu*, *X*., +, *TAC Oct. 2020 4005-4015*
- Control of Continuous-Time Linear Systems With Markov Jump Parameters in Reverse Time. *Narvaez, A.R.R.*, +, *TAC May 2020 2265-2271*
- Converse Optimality for Discrete-Time Systems. Gohrt, T., +, TAC May 2020 2257-2264
- Convex Searches for Discrete-Time Zames–Falb Multipliers. Carrasco, J., +, TAC Nov. 2020 4538-4553
- Discrete-Time Implementation of Homogeneous Differentiators. *Koch, S.*, +, *TAC Feb. 2020 757-762*
- Energy-to-Peak Filtering of Semi-Markov Jump Systems With Mismatched Modes. Xu, Z., +, TAC Oct. 2020 4356-4361
- Event-Triggered Stabilization for Continuous-Time Stochastic Systems. *Li*, *F*, +, *TAC Oct. 2020 4031-4046*
- Explicit Iterative Algorithms for Continuous Coupled Lyapunov Matrix Equations. *Sun, H.,* +, *TAC Aug. 2020 3631-3638*
- Finite-Time Distributed Linear Equation Solver for Solutions With Minimum *l*₁-Norm. Zhou, J., +, TAC April 2020 1691-1696
- Gradient-Based Discrete-Time Concurrent Learning for Standalone Function Approximation. Djaneye-Boundjou, O., +, TAC Feb. 2020 749-756
- Hankel Singular Values and LQG Characteristic Values of Discrete-Time Linear Systems in Cascade With Inner Systems. Bucolo, M., +, TAC Nov. 2020 4989-4994
- Kernel-Based Simultaneous Parameter-State Estimation for Continuous-Time Systems. Li, P., +, TAC July 2020 3053-3059
- Lebesgue-Approximation Model Predictive Control of Nonlinear Sampled-Data Systems. *Tao, J.*, +, *TAC Oct. 2020 4047-4060*
- Lyapunov Event-Triggered Stabilization With a Known Convergence Rate. *Proskurnikov, A.V.,* +, *TAC Feb. 2020 507-521*
- Lyapunov Stability for Impulsive Systems via Event-Triggered Impulsive Control. Li, X., +, TAC Nov. 2020 4908-4913
- Necessary and Sufficient Bit Rate Conditions to Stabilize a Scalar Continuous-Time LTI System Based on Event Triggering. *Ling, Q., TAC April* 2020 1598-1612
- New Gramians for Switched Linear Systems: Reachability, Observability, and Model Reduction. *Pontes Duff, I., +, TAC June 2020 2526-2535*
- Optimal Continuous-Discrete Linear Filter and Moment Equations for Nonlinear Diffusions. Cacace, F., +, TAC Oct. 2020 3961-3976

- Periodic Event-Triggered Control for Nonlinear Networked Control Systems. Wang, W., +, TAC Feb. 2020 620-635
- Preserving and Achieving Passivity-Short Property Through Discretization. Joo, Y., +, TAC Oct. 2020 4265-4272
- Riemannian Optimal Identification Method for Linear Systems With Symmetric Positive-Definite Matrix. Sato, K., +, TAC Nov. 2020 4493-4508
- Semi-Markov Jump Linear Systems With Incomplete Sojourn and Transition Information: Analysis and Synthesis. Ning, Z., +, TAC Jan. 2020 159-174
- Sensitivity to Cumulative Perturbations for a Class of Piecewise Constant Hybrid Systems. Sharifnassab, A., +, TAC March 2020 1057-1072
- Singularities and Moments of Nonlinear Systems. Padoan, A., +, TAC Aug. 2020 3647-3654
- Stabilization of Highly Nonlinear Hybrid Systems by Feedback Control Based on Discrete-Time State Observations. *Fei, C.*, +, *TAC July 2020* 2899-2912
- Structured Feedback Synthesis for Stability and Performance of Switched Systems. Chesi, G., +, TAC Nov. 2020 4695-4709
- The Implicit Discretization of the Supertwisting Sliding-Mode Control Algorithm. *Brogliato, B., +, TAC Aug, 2020 3707-3713*

Uniting Observers. Astolfi, D., +, TAC July 2020 2867-2882

Control engineering computing

- Data-Driven Economic NMPC Using Reinforcement Learning. Gros, S., +, TAC Feb. 2020 636-648
- Distributed Event-Triggered Gradient Method for Constrained Convex Minimization. Liu, C., +, TAC Feb. 2020 778-785
- Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning. Umlauft, J., +, TAC Oct. 2020 4154-4169
- Secure and Private Implementation of Dynamic Controllers Using Semihomomorphic Encryption. *Murguia*, C., +, *TAC Sept. 2020 3950-3957*

Control nonlinearities

- Analysis of Systems With Slope Restricted Nonlinearities Using Externally Positive Zames–Falb Multipliers. *Turner, M.C.*, +, *TAC April 2020 1660-1667*
- Backstepping Control of Coupled Linear Parabolic PDEs With Space and Time Dependent Coefficients. *Kerschbaum, S.*, +, *TAC July 2020 3060-3067*
- Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty. *Zheng, X*, +, *TAC March 2020 1310-1317*
- Continuous-Time and Sampled-Data Stabilizers for Nonlinear Systems With Input and Measurement Delays. *Battilotti, S., TAC April 2020 1568-1583*
- Convex Searches for Discrete-Time Zames–Falb Multipliers. Carrasco, J., +, TAC Nov. 2020 4538-4553
- Distributed Leader–Follower Affine Formation Maneuver Control for High-Order Multiagent Systems. *Chen, L., +, TAC Nov. 2020 4941-4948*
- Event-Triggered Global Finite-Time Control for a Class of Uncertain Nonlinear Systems. Zhang, C., +, TAC March 2020 1340-1347
- Fredholm Backstepping Control of Coupled Linear Parabolic PDEs With Input and Output Delays. *Deutscher*, J., +, *TAC July 2020 3128-3135*
- Integral Control of Stable Negative-Imaginary Systems Preceded by Hysteresis Nonlinearity. *Dey, A.*, +, *TAC March 2020 1333-1339*
- Lyapunov Stability Analysis of the Implicit Discrete-Time Twisting Control Algorithm. *Huber, O., +, TAC June 2020 2619-2626*
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*
- Quantized Nonstationary Filtering of Networked Markov Switching RSNSs: A Multiple Hierarchical Structure Strategy. *Cheng, J.*, +, *TAC Nov. 2020* 4816-4823
- Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs. *Deutscher, J., +, TAC May 2020 2207-2214*
- Stability Analysis for a Class of Linear 2 \times 2 Hyperbolic PDEs Using a Backstepping Transform. *Bou Saba*, D., +, *TAC July 2020 2941-2956*
- Stability Analysis of Dissipative Systems Subject to Nonlinear Damping via Lyapunov Techniques. Marx, S., +, TAC May 2020 2139-2146

Control system analysis

A Direct Proof of the Equivalence of Side Conditions for Strictly Positive Real Matrix Transfer Functions. *Ferrante*, A., +, *TAC Jan. 2020 450-452*

- Event-Triggered Stabilization for Continuous-Time Stochastic Systems. *Li*, *F*, +, *TAC Oct. 2020 4031-4046*
- Global Analysis of Synchronization Performance for Power Systems: Bridging the Theory-Practice Gap. Paganini, F, +, TAC July 2020 3007-3022

Control system security

- Almost Sure Stability of Nonlinear Systems Under Random and Impulsive Sequential Attacks. *He, W.*, +, *TAC Sept. 2020 3879-3886*
- Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. *Wu, G.*, +, *TAC Sept. 2020 3919-3926*
- Optimal Secure Control With Linear Temporal Logic Constraints. Niu, L., +, TAC June 2020 2434-2449
- Secure and Private Implementation of Dynamic Controllers Using Semihomomorphic Encryption. *Murguia*, C., +, *TAC Sept. 2020 3950-3957*
- Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks. *Peng, C.*, +, *TAC Sept. 2020* 3943-3949

Control system synthesis

- "Class-Type" Identification-Based Internal Models in Multivariable Nonlinear Output Regulation. *Bin, M.,* +, *TAC Oct. 2020 4369-4376*
- A Detector-Based Approach for the Constrained Quadratic Control of Discrete-Time Markovian Jump Linear Systems. Zabala, Y.A., +, TAC March 2020 1211-1217
- A Dynamic Feedback Framework for Control of Time-Delay Nonlinear Systems With Unstable Zero Dynamics. *Lin, W.*, +, *TAC Aug. 2020 3317-3332*
- A Lyapunov-Like Characterization of Predefined-Time Stability. *Jimenez-Rodriguez*, E., +, *TAC Nov. 2020 4922-4927*
- A Moving Target Defense Control Framework for Cyber-Physical Systems. Kanellopoulos, A., +, TAC March 2020 1029-1043
- A Stabilization Framework for the Output Regulation of Rational Nonlinear Systems. *Castro, R.d.S.*, +, *TAC Nov. 2020 4860-4865*
- A Suboptimality Approach to Distributed Linear Quadratic Optimal Control. Jiao, J., +, TAC March 2020 1218-1225
- A Switching Controller for a Class of MIMO Bilinear Systems With Time Delay. *Sanchez, T.,* +, *TAC May 2020 2250-2256*
- Adaptive Control for a Class of Multi-Input Multi-Output Plants With Arbitrary Relative Degree. *Qu, Z.*, +, *TAC July 2020 3023-3038*
- Adaptive Error Feedback Regulator Design for One-Dimensional Heat Equation With Unknown Harmonic Disturbance Anticollocated With Control. *Guo, W.*, +, *TAC Feb. 2020 824-830*
- Adaptive Event-Triggered Control of Nonlinear Systems With Controller and Parameter Estimator Triggering. *Huang, J.*, +, *TAC Jan. 2020 318-324*
- Adaptive Semiglobal Nonlinear Output Regulation: An Extended-State Observer Approach. *Wang, L.*, +, *TAC June 2020 2670-2677*
- ADRC Dynamic Stabilization of an Unstable Heat Equation. Zhang, Y, +, TAC Oct. 2020 4424-4429
- Algorithm to Compute Nonlinear Partial Observer Normal Form With Multiple Outputs. Saadi, W., +, TAC June 2020 2700-2707
- An *H_i*/*H*_∞ Optimization Approach to Event-Triggered Fault Detection for Linear Discrete Time Systems. *Zhong, M.*, +, *TAC Oct. 2020 4464-4471*
- An Explicit Reference Governor for the Intersection of Concave Constraints. Hosseinzadeh, M., +, TAC Jan. 2020 1-11
- An Improved Homogeneous Polynomial Approach for Adaptive Sliding-Mode Control of Markov Jump Systems With Actuator Faults. Du, C., +, TAC March 2020 955-969
- An LMI Approach to Stability Analysis of Coupled Parabolic Systems. Wakaiki, M., TAC Jan. 2020 404-411
- Analysis and Computation of the H_2 Norm of Delay Differential Algebraic Equations. *Gomez, M.A.*, +, *TAC May 2020 2192-2199*
- Analysis and Design of Continuous-Time Multivariable Periodic Controllers: An \mathcal{H}_{∞} /LTR-Based Approach. *Deshmukh*, A., +, TAC Aug. 2020 3608-3615
- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
- Auditor Product and Controller Synthesis for Nondeterministic Transition Systems With Practical LTL Specifications. *Zibaeenejad, M.H.*, +, *TAC Oct.* 2020 4281-4287

- Backstepping Control of Coupled Linear Parabolic PDEs With Space and Time Dependent Coefficients. *Kerschbaum, S.*, +, *TAC July 2020 3060-3067*
- Codesign of Event Trigger and Feedback Policy in Robust Model Predictive Control. *Liu*, *C.*, +, *TAC Jan. 2020 302-309*
- Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty. *Zheng, X*., +, *TAC March 2020 1310-1317*
- Completely Decentralized Design of Distributed Observer for Linear Systems. *Kim, T.*, +, *TAC Nov. 2020 4664-4678*
- Continuous Twisting Algorithm for Third-Order Systems. *Mendoza-Avila*, J., +, TAC July 2020 2814-2825
- Continuous-Time Accelerated Methods via a Hybrid Control Lens. Kolarijani, A.S., +, TAC Aug. 2020 3425-3440
- Continuous-Time and Sampled-Data Stabilizers for Nonlinear Systems With Input and Measurement Delays. *Battilotti, S., TAC April 2020 1568-1583*
- Control Synthesis for Permutation-Symmetric High-Dimensional Systems With Counting Constraints. *Nilsson, P.*, +, *TAC Feb. 2020 461-476*
- Control-Oriented Learning on the Fly. Ornik, M., +, TAC Nov. 2020 4800-4807
- Data Informativity: A New Perspective on Data-Driven Analysis and Control. van Waarde, H.J., +, TAC Nov. 2020 4753-4768
- Delay-Tolerant Adaptive Robust Tracking Control of Uncertain Time-Delay Systems. Nandiganahalli, J.S., +, TAC Feb. 2020 695-710
- Design of Privacy-Preserving Dynamic Controllers. *Kawano, Y.*, +, *TAC Sept. 2020 3863-3878*
- Design Procedure for Linear Unknown Input Functional Observers. Sakhraoui, I., +, TAC Feb. 2020 831-838
- Dissipativity Properties of Nonlinear Systems Under Network Constraints. Ghodrat, M., +, TAC June 2020 2708-2715
- Distributed Leader–Follower Affine Formation Maneuver Control for High-Order Multiagent Systems. Chen, L., +, TAC Nov. 2020 4941-4948
- Distributed Model Predictive Control for Linear Systems With Adaptive Terminal Sets. Darivianakis, G., +, TAC March 2020 1044-1056
- Distributed Optimal Coordination for Heterogeneous Linear Multiagent Systems With Event-Triggered Mechanisms. *Li, Z.*, +, *TAC April 2020* 1763-1770
- Distributed Time-Varying Convex Optimization for a Class of Nonlinear Multiagent Systems. *Huang, B.,* +, *TAC Feb. 2020 801-808*
- Disturbance Attenuation by Measurement Feedback in Nonlinear Systems via Immersion and Algebraic Conditions. *Mylvaganam, T.*, +, *TAC Feb.* 2020 854-860
- Dynamic Modularity Approach to Adaptive Control of Robotic Systems With Closed Architecture. Wang, H., +, TAC June 2020 2760-2767
- Event-Triggered H_∞ Control of Networked Control Systems With Distributed Transmission Delay. Yan, S., +, TAC Oct. 2020 4295-4301
- Event-Triggered Control for Semiglobal Robust Consensus of a Class of Nonlinear Uncertain Multiagent Systems. *Meng, H., +, TAC April 2020 1683-1690*
- Event-Triggered Design With Guaranteed Minimum Interevent Times and \mathcal{L}_p Performance. *Ghodrat*, M., +, *TAC April 2020 1668-1675*
- Event-Triggered Dynamic Output Feedback Control for Switched Systems With Frequent Asynchronism. *Fei, Z.*, +, *TAC July 2020 3120-3127*
- Event-Triggered Global Finite-Time Control for a Class of Uncertain Nonlinear Systems. Zhang, C., +, TAC March 2020 1340-1347
- Event-Triggered Observer Design for Delayed Output-Sampled Systems. Song, C., +, TAC Nov. 2020 4824-4831
- Event-Triggered Stabilization for Continuous-Time Stochastic Systems. *Li*, *F*, +, *TAC Oct. 2020 4031-4046*
- Exponential Stabilization of Port-Hamiltonian Boundary Control Systems via Energy Shaping. *Macchelli, A., +, TAC Oct. 2020 4440-4447*
- Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning. Umlauft, J., +, TAC Oct. 2020 4154-4169
- Feedforward Boundary Control for the Regulation of a Passive and Diffusive Scalar in Two-Dimensional Unsteady Flows. *Liu, W., TAC Nov. 2020* 4882-4886

- Finite-Time Sliding-Mode Control of Markovian Jump Cyber-Physical Systems Against Randomly Occurring Injection Attacks. Cao, Z., +, TAC March 2020 1264-1271
- Formulas for Data-Driven Control: Stabilization, Optimality, and Robustness. De Persis, C., +, TAC March 2020 909-924
- Fredholm Backstepping Control of Coupled Linear Parabolic PDEs With Input and Output Delays. *Deutscher, J.*, +, *TAC July 2020 3128-3135*
- Fully Distributed Resilient State Estimation Based on Distributed Median Solver. Lee, J.G., +, TAC Sept. 2020 3935-3942
- Global Sliding Mode Observers for Some Uncertain Mechanical Systems. Apaza-Perez, W.A., +, TAC March 2020 1348-1355
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*
- Graphon Control of Large-Scale Networks of Linear Systems. Gao, S., +, TAC Oct. 2020 4090-4105
- Guaranteeing Global Asymptotic Stability and Prescribed Transient and Steady-State Attributes via Uniting Control. *Kanakis, G.S.*, +, *TAC May* 2020 1956-1968
- Hybrid Control for Robust and Global Tracking on Smooth Manifolds. Casau, P., +, TAC May 2020 1870-1885
- Integral Control of Stable Negative-Imaginary Systems Preceded by Hysteresis Nonlinearity. *Dey*, *A.*, +, *TAC March 2020 1333-1339*
- Integral Input-to-State Stability of Networked Control Systems. Noroozi, N., +, TAC March 2020 1203-1210
- Lebesgue-Approximation Model Predictive Control of Nonlinear Sampled-Data Systems. *Tao, J.*, +, *TAC Oct. 2020 4047-4060*
- Limit-Cycle-Based Design of Formation Control for Mobile Agents. *Wang*, *C.*, +, *TAC Aug. 2020 3530-3543*
- Logic-Based Switching Control for Stabilization of Stochastic Feedforward Nonlinear Systems. Yu, M., TAC Oct. 2020 4408-4415
- Lyapunov Event-Triggered Stabilization With a Known Convergence Rate. Proskurnikov, A.V., +, TAC Feb. 2020 507-521
- Lyapunov Stability Analysis of the Implicit Discrete-Time Twisting Control Algorithm. *Huber, O.,* +, *TAC June 2020 2619-2626*
- Lyapunov Stability for Impulsive Systems via Event-Triggered Impulsive Control. Li, X., +, TAC Nov. 2020 4908-4913
- Model Matching and Passivation of MIMO Linear Systems via Dynamic Output Feedback and Feedforward. Sassano, M., +, TAC Oct. 2020 4016-4030
- Model Predictive Tracking Control for Invariant Systems on Matrix Lie Groups via Stable Embedding Into Euclidean Spaces. *Chang, D.E., +, TAC* July 2020 3191-3198
- Multiagent Flocking With Angle-Based Formation Shape Control. Jing, G., +, TAC Feb. 2020 817-823
- Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints. *Zhu, Y*, +, *TAC May 2020 2177-2184*
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*
- Nonlinearity Estimator-Based Control of A Class of Uncertain Nonlinear Systems. *Yang, J.*, +, *TAC May 2020 2230-2236*
- Novel All-Pass Factorization, All Solutions to Rational Matrix Equation and Control Application. *Stefanovski*, *J.*, *TAC July 2020 3176-3183*
- Observer Design For a Class of Parabolic Systems With Large Delays and Sampled Measurements. *Ahmed-Ali*, *T.*, +, *TAC May 2020 2200-2206*
- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y.*, +, *TAC Aug. 2020 3714-3721*
- Observer-Based Robust Controller Design With Simultaneous Optimization of Scaling Matrices. Sato, M., TAC Feb. 2020 861-866
- Observers and Disturbance Rejection Control for a Heat Equation. *Feng, H.*, +, *TAC Nov. 2020 4957-4964*
- On Event-Triggered Control of Nonlinear Stochastic Systems. Luo, S., +, TAC Jan. 2020 369-375
- On Robust Parameter Estimation in Finite-Time Without Persistence of Excitation. Wang, J., +, TAC April 2020 1731-1738

- On the Event-Triggered Controller Design. Ghodrat, M., +, TAC Oct. 2020 4122-4137
- On the Existence and Design of Functional Observers. Darouach, M., +, TAC June 2020 2751-2759
- On the Stabilization of an Overhead Crane System With Dynamic and Delayed Boundary Conditions. *Chentouf, B.,* +, *TAC Oct. 2020 4273-4280*
- On Unknown Input Observers of Linear Systems: Asymptotic Unknown Input Decoupling Approach. Ichalal, D., +, TAC March 2020 1197-1202
- Opacity Enforcement for Confidential Robust Control in Linear Cyber-Physical Systems. An, L., +, TAC March 2020 1234-1241
- Optimal Event-Triggered Control of Nondeterministic Linear Systems. Maity, D., +, TAC Feb. 2020 604-619
- Optimal Output Regulation for Square, Overactuated and Underactuated Linear Systems. *Bernhard, S.*, +, *TAC Oct. 2020 4416-4423*
- Orbital Stability Analysis for Perturbed Nonlinear Systems and Natural Entrainment via Adaptive Andronov–Hopf Oscillator. *Zhao, J.*, +, *TAC Jan. 2020 87-101*
- Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498
- Output Tracking of Boolean Control Networks. Zhang, X., +, TAC June 2020 2730-2735
- Passivity-Based Control for Hidden Markov Jump Systems With Singular Perturbations and Partially Unknown Probabilities. *Li*, *F*, +, *TAC Aug.* 2020 3701-3706
- Peaking Attenuation of High-Gain Observers Using Adaptive Techniques: State Estimation and Feedback Control. *Shakarami, M.*, +, *TAC Oct. 2020* 4215-4229
- Performance Improvement via Iterative Connection of Passive Systems. Urata, K., +, TAC March 2020 1325-1332
- Performance Output Tracking for Multidimensional Heat Equation Subject to Unmatched Disturbance and Noncollocated Control. *Zhou, H.*, +, *TAC May 2020 1940-1955*
- Performance Recovery of Dynamic Feedback-Linearization Methods for Multivariable Nonlinear Systems. Wu, Y., +, TAC April 2020 1365-1380
- Periodic Event-Triggered Control for Nonlinear Networked Control Systems. Wang, W., +, TAC Feb. 2020 620-635
- Preserving and Achieving Passivity-Short Property Through Discretization. Joo, Y., +, TAC Oct. 2020 4265-4272
- Realization of Reachability for the Control of a Class of Nonlinear Systems. Chai, Y, +, TAC March 2020 1073-1088
- Reduced Order Controller Design for Robust Output Regulation. *Paunonen*, L., +, *TAC June 2020 2480-2493*
- Reduced-Order Observer Design for Switched Descriptor Systems With Unknown Inputs. Zhang, J., +, TAC Jan. 2020 287-294
- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, D., +, *TAC May 2020 2300-2307*
- Removing SPR-Like Conditions in Adaptive Feedforward Control of Uncertain Systems. *Wang, Y.*, +, *TAC June 2020 2309-2324*
- Robust Optimal Filtering Over Lossy Networks. Feng, Y., +, TAC May 2020 2272-2277
- Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs. *Deutscher, J., +, TAC May 2020 2207-2214*
- Safe Controller Synthesis for Data-Driven Differential Inclusions. *Ahmadi*, M., +, *TAC Nov. 2020 4934-4940*
- Secure and Private Implementation of Dynamic Controllers Using Semihomomorphic Encryption. *Murguia, C., +, TAC Sept. 2020 3950-3957*
- Semi-Markov Jump Linear Systems With Incomplete Sojourn and Transition Information: Analysis and Synthesis. Ning, Z., +, TAC Jan. 2020 159-174
- Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes. *Zhang, C.*, +, *TAC May* 2020 2185-2191
- Set-Valued Feedback Control and Its Application to Event-Triggered Sampled-Data Systems. *Jiang, Y.*, +, *TAC Nov. 2020 4965-4972*

Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. *Qi, W.*, +, *TAC Jan. 2020 361-368*

- Stability and Stabilization Through Envelopes for Retarded and Neutral Time-Delay Systems. Cardeliquio, C.B., +, TAC April 2020 1640-1646
- Stabilization of Highly Nonlinear Hybrid Systems by Feedback Control Based on Discrete-Time State Observations. *Fei, C.*, +, *TAC July 2020* 2899-2912
- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984
- Stabilization of Switched Linear Systems Subject to Actuator Saturation via Invariant Semiellipsoids. *Lian, J.*, +, *TAC Oct. 2020 4332-4339*
- Stabilization of Two-Port Networked Systems With Simultaneous Uncertainties in Plant, Controller, and Communication Channels. *Zhao, D.*, +, *TAC March 2020 1160-1175*
- State-Constrained Nonlinear L₂-Gain Control. Wu, J., +, TAC Feb. 2020 771-777
- Structural Characterization of Linear Quantum Systems With Application to Back-Action Evading Measurement. *Zhang, G.*, +, *TAC July 2020 3157-3163*
- Structured Feedback Synthesis for Stability and Performance of Switched Systems. Chesi, G., +, TAC Nov. 2020 4695-4709
- Structuring Multilevel Discrete-Event Systems With Dependence Structure Matrices. Goorden, M., +, TAC April 2020 1625-1639
- Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks. *Peng, C.*, +, *TAC Sept. 2020* 3943-3949
- Synthesis of Dynamic Masks for Infinite-Step Opacity. Yin, X., +, TAC April 2020 1429-1441
- Synthesizing Communication Plans for Reachability and Safety Specifications. Hashimoto, K., +, TAC Feb. 2020 561-576
- Trajectory Planning Approach to Output Tracking for a 1-D Wave Equation. Feng, H., +, TAC May 2020 1841-1854

Trajectory-Constrained Collective Circular Motion With Different Phase Arrangements. Jain, A., +, TAC May 2020 2237-2244

Control systems

- Compositional (In)Finite Abstractions for Large-Scale Interconnected Stochastic Systems. *Lavaei*, A., +, *TAC Dec. 2020 5280-5295*
- Equivalence-Based Model of Dimension-Varying Linear Systems. Cheng, D., +, TAC Dec. 2020 5444-5449
- Guest Editorial: Special Issue on Security and Privacy of Distributed Algorithms and Network Systems. *Chen*, Z., +, *TAC Sept. 2020 3725-3727*
- Optimal Construction of Koopman Eigenfunctions for Prediction and Control. *Korda, M.*, +, *TAC Dec. 2020 5114-5129*

Controllability

- A Note on Relative Controllability of Higher Order Linear Delayed Discrete Systems. *Diblik, J.*, +, *TAC Dec. 2020 5472-5479*
- An Approach to Improve Permissiveness of Supervisors for GMECs in Time Petri Net Systems. *Li, L., +, TAC Jan. 2020 237-251*
- Analysis and Computation of the H_2 Norm of Delay Differential Algebraic Equations. *Gomez, M.A.*, +, *TAC May 2020 2192-2199*
- Analyzing Controllability of Bilinear Systems on Symmetric Groups: Mapping Lie Brackets to Permutations. *Zhang, W.*, +, *TAC Nov. 2020 4895-4901*
- Approximate Controllability and Approximate Observability of Singular Distributed Parameter Systems. *Ge*, *Z*., +, *TAC May 2020 2294-2299*
- Control of Nondeterministic Systems for Bisimulation Equivalence Under Partial Information. *Farhat, H., TAC Dec. 2020 5437-5443*
- Efficient Verification of Observability and Reconstructibility for Large Boolean Control Networks With Special Structures. *Zhang, K.*, +, *TAC Dec. 2020 5144-5158*
- Graphon Control of Large-Scale Networks of Linear Systems. Gao, S., +, TAC Oct. 2020 4090-4105
- Local Controllability of Single-Input Nonlinear Systems Based on Deterministic Wiener Processes. Nishimura, Y., +, TAC Jan. 2020 354-360
- Notions of Centralized and Decentralized Opacity in Linear Systems. Ramasubramanian, B., +, TAC April 2020 1442-1455
- Output Tracking of Boolean Control Networks. *Zhang, X.*, +, *TAC June 2020* 2730-2735

- Scheduling Multiple Agents in a Persistent Monitoring Task Using Reachability Analysis. Yu, X., +, TAC April 2020 1499-1513
- Stability-Preserving Morse Normal Form. Kucera, V., TAC Dec. 2020 5099-5113
- Structural Controllability of Networks With Dynamical Structured Nodes. Commault, C., TAC June 2020 2736-2742
- Sub-Riemannian Geodesics in *SU(n/S(U(n-1 × U(1))*) and Optimal Control of Three Level Quantum Systems. *Albertini, F., +, TAC March 2020 1176-1191*

Convection

Feedforward Boundary Control for the Regulation of a Passive and Diffusive Scalar in Two-Dimensional Unsteady Flows. *Liu, W., TAC Nov. 2020* 4882-4886

Convergence

- A New Varying-Gain-Exponent-Based Differentiator/Observer: An Efficient Balance Between Linear and Sliding-Mode Algorithms. *Ghanes, M.*, +, *TAC Dec. 2020 5407-5414*
- A Proximal Diffusion Strategy for Multiagent Optimization With Sparse Affine Constraints. Alghunaim, S.A., +, TAC Nov. 2020 4554-4567
- A Smooth Double Proximal Primal-Dual Algorithm for a Class of Distributed Nonsmooth Optimization Problems. *Wei*, *Y*, +, *TAC April 2020 1800-1806*
- Accelerated Distributed Nesterov Gradient Descent. Qu, G., +, TAC June 2020 2566-2581
- Achieving Linear Convergence in Distributed Asynchronous Multiagent Optimization. *Tian, Y.*, +, *TAC Dec. 2020 5264-5279*
- Adaptive Control by Regulation-Triggered Batch Least Squares. *Karafyllis*, *I.*, +, *TAC July 2020 2842-2855*
- Almost Sure Stability of Nonlinear Systems Under Random and Impulsive Sequential Attacks. *He, W.*, +, *TAC Sept. 2020 3879-3886*
- Average Consensus by Graph Filtering: New Approach, Explicit Convergence Rate, and Optimal Design. Yi, J., +, TAC Jan. 2020 191-206
- Consensus of Multi-Agent Systems Under Binary-Valued Measurements and Recursive Projection Algorithm. *Wang, T.*, +, *TAC June 2020 2678-2685*
- Continuous-Time Accelerated Methods via a Hybrid Control Lens. Kolarijani, A.S., +, TAC Aug. 2020 3425-3440
- Continuous-Time Integral Dynamics for a Class of Aggregative Games With Coupling Constraints. *De Persis, C.*, +, *TAC May 2020 2171-2176*
- Decentralized Optimization Over Time-Varying Directed Graphs With Row and Column-Stochastic Matrices. *Saadatniaki*, F., +, *TAC Nov. 2020 4769-4780*
- Delayed and Switched Control of Formations on a Line Segment: Delays and Switches Do Not Matter. *Aleksandrov, A.*, +, *TAC Feb. 2020 794-800*
- Distributed Coupled Multiagent Stochastic Optimization. Alghunaim, S.A., +, TAC Jan. 2020 175-190
- Distributed Finite-Time Optimization for Integrator Chain Multiagent Systems With Disturbances. *Wang, X., +, TAC Dec. 2020 5296-5311*
- Distributed Heavy-Ball: A Generalization and Acceleration of First-Order Methods With Gradient Tracking. Xin, R., +, TAC June 2020 2627-2633
- Distributed Learning Over Networks: Effect of Using Historical Observations. Shi, C., +, TAC Dec. 2020 5503-5509
- Distributed Mechanism Design With Learning Guarantees for Private and Public Goods Problems. Sinha, A., +, TAC Oct. 2020 4106-4121
- Distributed Multiagent Convex Optimization Over Random Digraphs. Alaviani, S.S., +, TAC March 2020 986-998
- Distributed Smooth Convex Optimization With Coupled Constraints. *Liang*, S., +, TAC Jan. 2020 347-353
- Dual Averaging Push for Distributed Convex Optimization Over Time-Varying Directed Graph. Liang, S., +, TAC April 2020 1785-1791
- Dynamic Sharing Through the ADMM. Cao, X., +, TAC May 2020 2215-2222
- Event-Triggered Bipartite Consensus for Multiagent Systems: A Zeno-Free Analysis. Yu, H., +, TAC Nov. 2020 4866-4873

Event-Triggered Stabilization for Continuous-Time Stochastic Systems. *Li*, *F*, +, *TAC Oct. 2020 4031-4046*

- Explicit Iterative Algorithms for Continuous Coupled Lyapunov Matrix Equations. *Sun, H.*, +, *TAC Aug. 2020 3631-3638*
- Finite-Time Guarantees for Byzantine-Resilient Distributed State Estimation With Noisy Measurements. Su, L., +, TAC Sept. 2020 3758-3771
- Fixed-Time Leader-Following Consensus for High-Order Time-Varying Nonlinear Multiagent Systems. You, X., +, TAC Dec. 2020 5510-5516
- Interval Consensus for Multiagent Networks. Fontan, A., +, TAC May 2020 1855-1869
- Koopman-Based Lifting Techniques for Nonlinear Systems Identification. Mauroy, A., +, TAC June 2020 2550-2565
- Leader–Follower Network Aggregative Game With Stochastic Agents' Communication and Activeness. Shokri, M., +, TAC Dec. 2020 5496-5502
- Lyapunov Criterion for Stochastic Systems and Its Applications in Distributed Computation. *Qin*, *Y*, +, *TAC Feb. 2020 546-560*
- MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels. *Cai, S.*, +, *TAC May 2020 2046-*2061
- Observer Design for Nonlinear Systems With Output Transformation. de Cossio, F.G., +, TAC Dec. 2020 5205-5219
- On Convergence for Piecewise Affine Models of Gene Regulatory Networks via a Lyapunov Approach. *Pasquini*, *M.*, +, *TAC Aug. 2020 3333-3348*
- On Unknown Input Observers of Linear Systems: Asymptotic Unknown Input Decoupling Approach. Ichalal, D., +, TAC March 2020 1197-1202
- Proximal Algorithms for Large-Scale Statistical Modeling and Sensor/Actuator Selection. Zare, A., +, TAC Aug. 2020 3441-3456
- Push-Sum on Random Graphs: Almost Sure Convergence and Convergence Rate. *Rezaienia*, *P*, +, *TAC March 2020 1295-1302*
- Random Directions Stochastic Approximation With Deterministic Perturbations. Prashanth, L.A., +, TAC June 2020 2450-2465
- Uniting Observers. Astolfi, D., +, TAC July 2020 2867-2882
- Varying-Parameter Convergent-Differential Neural Solution to Time-Varying Overdetermined System of Linear Equations. *Zhang, Z.*, +, *TAC Feb.* 2020 874-881

Convergence of numerical methods

- A Fast Distributed Asynchronous Newton-Based Optimization Algorithm. Mansoori, F., +, TAC July 2020 2769-2784
- Analysis of Stochastic Approximation Schemes With Set-Valued Maps in the Absence of a Stability Guarantee and Their Stabilization. *Yaji, V.G.*, +, *TAC March 2020 1100-1115*
- Constrained Search via Penalization for Continuous Simulation Optimization. Hu, L., +, TAC Nov. 2020 4741-4752
- Distributed Second-Order Methods With Increasing Number of Working Nodes. Jerinkic, N.K., +, TAC Feb. 2020 846-853
- Guaranteeing Global Asymptotic Stability and Prescribed Transient and Steady-State Attributes via Uniting Control. *Kanakis, G.S.*, +, *TAC May* 2020 1956-1968
- Heterogeneous Hegselmann–Krause Dynamics With Environment and Communication Noise. Chen, G., +, TAC Aug. 2020 3409-3424
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*
- On the Positive Effect of Delay on the Rate of Convergence of a Class of Linear Time-Delayed Systems. *Moradian, H.,* +, *TAC Nov. 2020 4832-4839*
- Proper Orthogonal Decomposition Method to Nonlinear Filtering Problems in Medium-High Dimension. Wang, Z., +, TAC April 2020 1613-1624

Convex functions

Achieving Linear Convergence in Distributed Asynchronous Multiagent Optimization. *Tian, Y.*, +, *TAC Dec. 2020 5264-5279*

Convex programming

- A Decentralized Event-Based Approach for Robust Model Predictive Control. Kolarijani, A.S., +, TAC Aug. 2020 3517-3529
- A Distributed Continuous-Time Algorithm for Nonsmooth Constrained Optimization. Chen, G., +, TAC Nov. 2020 4914-4921
- A Fast Distributed Asynchronous Newton-Based Optimization Algorithm. Mansoori, F., +, TAC July 2020 2769-2784
- A Modified Saddle-Point Dynamics for Distributed Convex Optimization on General Directed Graphs. *Touri, B.,* +, *TAC July 2020 3098-3103*

- A New Method for Control Allocation of Aircraft Flight Control System. Yang, Y., +, TAC April 2020 1413-1428
- A Reference Governor for Nonlinear Systems With Disturbance Inputs Based on Logarithmic Norms and Quadratic Programming. *Li*, *N.*, +, *TAC July 2020 3207-3214*
- A Smooth Double Proximal Primal-Dual Algorithm for a Class of Distributed Nonsmooth Optimization Problems. *Wei, Y.*, +, *TAC April 2020 1800-1806*
- Accelerated Distributed Nesterov Gradient Descent. Qu, G., +, TAC June 2020 2566-2581
- AsySPA: An Exact Asynchronous Algorithm for Convex Optimization Over Digraphs. *Zhang, J.*, +, *TAC June 2020 2494-2509*
- Constrained Subspace Method for the Identification of Structured State-Space Models (COSMOS). Yu, C., +, TAC Oct. 2020 4201-4214
- Continuous-Time Integral Dynamics for a Class of Aggregative Games With Coupling Constraints. *De Persis, C.*, +, *TAC May 2020 2171-2176*
- Cooperative Data-Driven Distributionally Robust Optimization. *Cherukuri, A.*, +, *TAC Oct. 2020 4400-4407*
- Distributed Coupled Multiagent Stochastic Optimization. Alghunaim, S.A., +, TAC Jan. 2020 175-190
- Distributed Event-Triggered Gradient Method for Constrained Convex Minimization. Liu, C., +, TAC Feb. 2020 778-785
- Distributed Heavy-Ball: A Generalization and Acceleration of First-Order Methods With Gradient Tracking. Xin, R., +, TAC June 2020 2627-2633
- Distributed Multiagent Convex Optimization Over Random Digraphs. *Alaviani, S.S.*, +, *TAC March 2020 986-998*
- Distributed Second-Order Methods With Increasing Number of Working Nodes. Jerinkic, N.K., +, TAC Feb. 2020 846-853
- Distributed Smooth Convex Optimization With Coupled Constraints. *Liang*, S., +, *TAC Jan. 2020 347-353*
- Distributed Time-Varying Convex Optimization for a Class of Nonlinear Multiagent Systems. *Huang, B.,* +, *TAC Feb. 2020 801-808*
- Dual Averaging Push for Distributed Convex Optimization Over Time-Varying Directed Graph. *Liang*, S., +, *TAC April 2020 1785-1791*
- Dynamic Sharing Through the ADMM. Cao, X., +, TAC May 2020 2215-2222
- Entropy Maximization for Markov Decision Processes Under Temporal Logic Constraints. Savas, Y., +, TAC April 2020 1552-1567
- Geometric Programming for Optimal Positive Linear Systems. Ogura, M., +, TAC Nov. 2020 4648-4663
- Inner-Approximating Reachable Sets for Polynomial Systems With Time-Varying Uncertainties. *Xue, B., +, TAC April 2020 1468-1483*
- Input–Output Performance of Linear–Quadratic Saddle-Point Algorithms With Application to Distributed Resource Allocation Problems. *Simpson-Porco*, J.W., +, TAC May 2020 2032-2045
- Online Distributed Optimization With Strongly Pseudoconvex-Sum Cost Functions. Lu, K., +, TAC Jan. 2020 426-433
- Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401
- Optimal Control of Polynomial Hybrid Systems via Convex Relaxations. Zhao, P., +, TAC May 2020 2062-2077
- Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. Wu, G., +, TAC Sept. 2020 3919-3926
- Parametric Optimization Based MPC for Systems of Systems With Affine Coordination Constraints. *Novoselnik*, B., +, *TAC Feb. 2020 649-663*
- Random Directions Stochastic Approximation With Deterministic Perturbations. Prashanth, L.A., +, TAC June 2020 2450-2465
- Resilient Leader-Follower Consensus to Arbitrary Reference Values in Time-Varying Graphs. Usevitch, J., +, TAC April 2020 1755-1762
- Sensitivity-Based Warmstarting for Nonlinear Model Predictive Control With Polyhedral State and Control Constraints. *Liao-McPherson, D.*, +, *TAC Oct. 2020 4288-4294*
- SI-ADMM: A Stochastic Inexact ADMM Framework for Stochastic Convex Programs. Xie, Y, +, TAC June 2020 2355-2370

Structured Feedback Synthesis for Stability and Performance of Switched Systems. Chesi, G., +, TAC Nov. 2020 4695-4709

Cooperative systems

- Cooperative Data-Driven Distributionally Robust Optimization. *Cherukuri, A.*, +, *TAC Oct. 2020 4400-4407*
- Dynamical Systems With a Cyclic Sign Variation Diminishing Property. *Ben Avraham, T.*, +, *TAC March 2020 941-954*

Correlation

- An Input–Output Approach to Structured Stochastic Uncertainty. *Bamieh*, *B.*, +, *TAC Dec. 2020 5012-5027*
- Correlation methods
 - Identification of Linear Models From Quantized Data: A Midpoint-Projection Approach. Risuleo, R.S., +, TAC July 2020 2801-2813
- Cost function
 - Analytic Sensor Rules for Optimal Distributed Decision Given K-Out-of-L Fusion Rule Under Monte Carlo Approximation. Liao, Y., +, TAC Dec. 2020 5488-5495
 - Distributed Finite-Time Optimization for Integrator Chain Multiagent Systems With Disturbances. *Wang, X., +, TAC Dec. 2020 5296-5311*
 - Leader–Follower Network Aggregative Game With Stochastic Agents' Communication and Activeness. *Shokri, M., +, TAC Dec. 2020 5496-5502*

Cost optimal control

Tracking Control of Nonlinear Networked and Quantized Control Systems With Communication Delays. *Ren, W.*, +, *TAC Aug. 2020 3685-3692*

Covariance analysis

An Optimal Data Fusion Algorithm in the Presence of Unknown Cross Covariances. Zhang, X., TAC March 2020 1226-1233

Covariance matrices

- An Input–Output Approach to Structured Stochastic Uncertainty. *Bamieh*, *B.*, +, *TAC Dec. 2020 5012-5027*
- Chandrasekhar-Based Maximum Correntropy Kalman Filtering With the Adaptive Kernel Size Selection. *Kulikova, M.V., TAC Feb. 2020* 741-748
- Distributed Kalman Filters With State Equality Constraints: Time-Based and Event-Triggered Communications. *He, X.*, +, *TAC Jan. 2020 28-43*
- Nonlinear Filtering Method Using a Switching Error Model for Outlier-Contaminated Observations. Nakabayashi, A., +, TAC July 2020 3150-3156
- Posterior Sampling-Based Reinforcement Learning for Control of Unknown Linear Systems. *Ouyang, Y.*, +, *TAC Aug. 2020 3600-3607*
- Smooth Interpolation of Covariance Matrices and Brain Network Estimation: Part II. Ning, L., TAC May 2020 1901-1910
- State-Space Realizations and Optimal Smoothing for Gaussian Generalized Reciprocal Processes. *White, L.B., +, TAC Jan. 2020 389-396*
- Cranes
 - An Explicit Reference Governor for the Intersection of Concave Constraints. Hosseinzadeh, M., +, TAC Jan. 2020 1-11
- On the Stabilization of an Overhead Crane System With Dynamic and Delayed Boundary Conditions. *Chentouf, B.*, +, *TAC Oct. 2020 4273-4280* **Cryptography**
 - On the Stability of Unverified Transactions in a DAG-Based Distributed Ledger. *Ferraro*, *P*., +, *TAC Sept. 2020 3772-3783*
 - Privacy-Preserving Distributed Averaging via Homomorphically Encrypted Ratio Consensus. *Hadjicostis, C.N.,* +, *TAC Sept. 2020 3887-3894*
 - Secure and Private Implementation of Dynamic Controllers Using Semihomomorphic Encryption. *Murguia, C., +, TAC Sept. 2020 3950-3957*

Cyber-physical systems

- An Event-Based Stealthy Attack on Remote State Estimation. Cheng, P., +, TAC Oct. 2020 4348-4355
- Critical Observability for Automata and Petri Nets. Masopust, T., TAC Jan. 2020 341-346
- Distributed Event-Triggered Gradient Method for Constrained Convex Minimization. Liu, C., +, TAC Feb. 2020 778-785
- Interaction-Based Distributed Learning in Cyber-Physical and Social Networks. Sasso, F., +, TAC Jan. 2020 223-236
- Malicious Attacks on State Estimation Against Distributed Control Systems. Lu, A., +, TAC Sept. 2020 3911-3918
- Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. *Wu, G.*, +, *TAC Sept. 2020 3919-3926*
- Robustness of Interdependent Cyber-Physical Systems Against Cascading Failures. Zhang, Y., +, TAC Feb. 2020 711-726

Cyberattack

A Game-Theoretic Approach for Dynamic Information Flow Tracking to Detect Multistage Advanced Persistent Threats. *Moothedath, S.*, +, *TAC Dec.* 2020 5248-5263

D

Damping

- Continuous Control for Fully Damped Mechanical Systems With Input Constraints: Finite-Time and Exponential Tracking. Zamora-Gomez, G.I., +, TAC Feb. 2020 882-889
- Exponential Stability of a Schrödinger Equation Through Boundary Coupling a Wave Equation. Wang, J., +, TAC July 2020 3136-3142
- Input-to-State Stability of a Clamped-Free Damped String in the Presence of Distributed and Boundary Disturbances. *Lhachemi, H.*, +, *TAC March* 2020 1248-1255
- Regulation of Inhomogeneous Drilling Model With a P-I Controller. Terrand-Jeanne, A., +, TAC Jan. 2020 58-71
- Stability Analysis of Dissipative Systems Subject to Nonlinear Damping via Lyapunov Techniques. Marx, S., +, TAC May 2020 2139-2146

Data aggregation

Competitive Statistical Estimation With Strategic Data Sources. Westenbroek, T., +, TAC April 2020 1537-1551

Data communication

Whittle Index Policy for Dynamic Multichannel Allocation in Remote State Estimation. *Wang, J.*, +, *TAC Feb. 2020 591-603*

Data privacy

- Design of Privacy-Preserving Dynamic Controllers. *Kawano, Y.*, +, *TAC Sept. 2020 3863-3878*
- Privacy-Preserving Distributed Averaging via Homomorphically Encrypted Ratio Consensus. *Hadjicostis, C.N.*, +, *TAC Sept. 2020 3887-3894*
- Secure and Private Implementation of Dynamic Controllers Using Semihomomorphic Encryption. Murguia, C., +, TAC Sept. 2020 3950-3957

DC motors

- Passivity-Based Control for Hidden Markov Jump Systems With Singular Perturbations and Partially Unknown Probabilities. *Li*, *F*, +, *TAC Aug.* 2020 3701-3706
- Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. *Qi, W.*, +, *TAC Jan. 2020 361-368*

Decentralized control

- A Decentralized Event-Based Approach for Robust Model Predictive Control. Kolarijani, A.S., +, TAC Aug. 2020 3517-3529
- Completely Decentralized Design of Distributed Observer for Linear Systems. *Kim, T.*, +, *TAC Nov. 2020 4664-4678*
- Continuous-Time Integral Dynamics for a Class of Aggregative Games With Coupling Constraints. *De Persis, C.*, +, *TAC May 2020 2171-2176*
- Decentralized Goal Assignment and Safe Trajectory Generation in Multirobot Networks via Multiple Lyapunov Functions. *Panagou, D.*, +, *TAC Aug. 2020 3365-3380*
- Multiagent Flocking With Angle-Based Formation Shape Control. Jing, G., +, TAC Feb. 2020 817-823
- Optimal Local and Remote Controllers With Unreliable Uplink Channels: An Elementary Proof. *Afshari, M.*, +, *TAC Aug. 2020 3616-3622*

Decidability

Critical Observability for Automata and Petri Nets. Masopust, T., TAC Jan. 2020 341-346

Decision making

- Collective Stochastic Discrete Choice Problems: A Min-LQG Dynamic Game Formulation. Salhab, R., +, TAC Aug. 2020 3302-3316
- Decentralized Goal Assignment and Safe Trajectory Generation in Multirobot Networks via Multiple Lyapunov Functions. *Panagou, D.*, +, *TAC Aug. 2020 3365-3380*
- Deep Teams: Decentralized Decision Making With Finite and Infinite Number of Agents. Arabneydi, J., +, TAC Oct. 2020 4230-4245

Inverse Risk-Sensitive Reinforcement Learning. Ratliff, L.J., +, TAC March 2020 1256-1263

Learning-Based Event-Triggered Control for Synchronization of Passive Multiagent Systems Under Attack. *Rahnama*, A., +, *TAC Oct. 2020 4170-*4185

Decision theory

- A Universal Empirical Dynamic Programming Algorithm for Continuous State MDPs. *Haskell, W.B.*, +, *TAC Jan. 2020 115-129*
- Asymptotic Optimality of Finite Model Approximations for Partially Observed Markov Decision Processes With Discounted Cost. Saldi, N., +, TAC Jan. 2020 130-142
- Entropy Maximization for Markov Decision Processes Under Temporal Logic Constraints. Savas, Y., +, TAC April 2020 1552-1567
- Information Relaxation Bounds for Partially Observed Markov Decision Processes. *Haugh, M.B.*, +, *TAC Aug. 2020 3256-3271*
- Risk Probability Minimization Problems for Continuous-Time Markov Decision Processes on Finite Horizon. *Huo, H.*, +, *TAC July 2020 3199-3206*
- Whittle Index Policy for Dynamic Multichannel Allocation in Remote State Estimation. *Wang, J.*, +, *TAC Feb. 2020 591-603*

Decoding

- Stabilization of Nonlinear Dynamic Systems Over Limited Capacity Communication Channels. Sanjaroon, V., +, TAC Aug. 2020 3655-3662
- State-Secrecy Codes for Networked Linear Systems. *Tsiamis, A.*, +, *TAC May 2020 2001-2015*

Delay systems

- A Dynamic Feedback Framework for Control of Time-Delay Nonlinear Systems With Unstable Zero Dynamics. *Lin, W.*, +, *TAC Aug. 2020 3317-3332* Asymptotical Stability of Probabilistic Boolean Networks With State Delays. *Zhu, S.*, +, *TAC April 2020 1779-1784*
- Delay-Tolerant Adaptive Robust Tracking Control of Uncertain Time-Delay Systems. Nandiganahalli, J.S., +, TAC Feb. 2020 695-710
- Discrete-Time Systems With Constrained Time Delays and Delay-Dependent Lyapunov Functions. *Pepe, P., TAC April 2020 1724-1730*
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*
- Hybrid Systems With Delayed Jumps: Asymptotic Stability via Robustness and Lyapunov Conditions. *Altin, B.*, +, *TAC Aug. 2020 3381-3396*
- Input-to-State Stability of Time-Delay Systems With Delay-Dependent Impulses. *Liu*, *X*., +, *TAC April 2020 1676-1682*
- Necessary and Sufficient Bit Rate Conditions to Stabilize a Scalar Continuous-Time LTI System Based on Event Triggering. *Ling, Q., TAC April* 2020 1598-1612
- Necessary Stability Conditions for Integral Delay Systems. Ortiz, R., +, TAC Oct. 2020 4377-4384
- On the Positive Effect of Delay on the Rate of Convergence of a Class of Linear Time-Delayed Systems. *Moradian, H., +, TAC Nov. 2020 4832-4839*
- Quasi-Polynomial-Based Robust Stability of Time-Delay Systems Can be Less Conservative Than Lyapunov–Krasovskii Approaches. Angulo, S., +, TAC July 2020 3164-3169
- Stability and Stabilization of Infinite Delay Systems: A Lyapunov-Based Approach. Xu, X., +, TAC Nov. 2020 4509-4524
- Stability and Stabilization Through Envelopes for Retarded and Neutral Time-Delay Systems. Cardeliquio, C.B., +, TAC April 2020 1640-1646
- Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks. *Peng, C.*, +, *TAC Sept. 2020* 3943-3949

Delay-differential systems

Analysis and Computation of the H_2 Norm of Delay Differential Algebraic Equations. *Gomez, M.A.*, +, *TAC May 2020 2192-2199*

Delays

- A Note on Relative Controllability of Higher Order Linear Delayed Discrete Systems. *Diblik, J.*, +, *TAC Dec. 2020 5472-5479*
- A Novel Method to Compute the Structured Distance to Instability for Combined Uncertainties on Delays and System Matrices. *Borgioli, F.*, +, *TAC April 2020 1747-1754*
- A Switching Controller for a Class of MIMO Bilinear Systems With Time Delay. *Sanchez, T., +, TAC May 2020 2250-2256*

Achieving Linear Convergence in Distributed Asynchronous Multiagent Optimization. *Tian, Y.*, +, *TAC Dec. 2020 5264-5279*

- Analysis and Computation of the H_2 Norm of Delay Differential Algebraic Equations. *Gomez, M.A.*, +, *TAC May 2020 2192-2199*
- Asymptotic Stability Analysis of Discrete-Time Switched Cascade Nonlinear Systems With Delays. *Liu*, *X.*, +, *TAC June 2020 2686-2692*
- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
- AsySPA: An Exact Asynchronous Algorithm for Convex Optimization Over Digraphs. Zhang, J., +, TAC June 2020 2494-2509

Consensus of Linear Multiagent Systems With Distributed Infinite Transmission Delays: A Low Gain Approach. Xu, X., +, TAC Feb. 2020 809-816

Continuous Discrete Sequential Observers for Time-Varying Systems Under Sampling and Input Delays. *Mazenc, F.*, +, *TAC April 2020 1704-1709*

Continuous-Time and Sampled-Data Stabilizers for Nonlinear Systems With Input and Measurement Delays. *Battilotti, S., TAC April 2020 1568-1583*

Delay-Tolerant Adaptive Robust Tracking Control of Uncertain Time-Delay Systems. Nandiganahalli, J.S., +, TAC Feb. 2020 695-710

Delayed and Switched Control of Formations on a Line Segment: Delays and Switches Do Not Matter. *Aleksandrov, A.*, +, *TAC Feb. 2020 794-800*

Discrete-Time Systems With Constrained Time Delays and Delay-Dependent Lyapunov Functions. *Pepe, P., TAC April 2020 1724-1730*

Event-Triggered H_{∞} Control of Networked Control Systems With Distributed Transmission Delay. *Yan, S.*, +, *TAC Oct. 2020 4295-4301*

Event-Triggered Observer Design for Delayed Output-Sampled Systems. Song, C., +, TAC Nov. 2020 4824-4831

Fredholm Backstepping Control of Coupled Linear Parabolic PDEs With Input and Output Delays. *Deutscher*, J., +, *TAC July 2020 3128-3135*

- Geometric Programming for Optimal Positive Linear Systems. *Ogura, M.*, +, *TAC Nov. 2020 4648-4663*
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*

Hankel Singular Values and LQG Characteristic Values of Discrete-Time Linear Systems in Cascade With Inner Systems. Bucolo, M., +, TAC Nov. 2020 4989-4994

Integral Input-to-State Stability of Networked Control Systems. Noroozi, N., +, TAC March 2020 1203-1210

Marking Estimation in a Class of Time Labeled Petri Nets. Ma, Z., +, TAC Feb. 2020 493-506

- Mean Field Games With Parametrized Followers. *Bensoussan, A.*, +, *TAC Jan. 2020 12-27*
- Necessary Stability Conditions for Integral Delay Systems. Ortiz, R., +, TAC Oct. 2020 4377-4384
- Observer Design For a Class of Parabolic Systems With Large Delays and Sampled Measurements. *Ahmed-Ali*, *T.*, +, *TAC May 2020 2200-2206*

On Boundedness of Error Covariances for Kalman Consensus Filtering Problems. Li, W., +, TAC June 2020 2654-2661

On Positive Solutions of a Delay Equation Arising When Trading in Financial Markets. *Hsieh*, C., +, *TAC July 2020 3143-3149*

On the Positive Effect of Delay on the Rate of Convergence of a Class of Linear Time-Delayed Systems. *Moradian, H.,* +, *TAC Nov. 2020 4832-4839*

On the Stabilization of an Overhead Crane System With Dynamic and Delayed Boundary Conditions. *Chentouf, B.,* +, *TAC Oct. 2020 4273-4280*

Predictor Feedback for Uncertain Linear Systems With Distributed Input Delays. *Zhu, Y.,* +, *TAC Dec. 2020 5344-5351*

Quasi-Polynomial-Based Robust Stability of Time-Delay Systems Can be Less Conservative Than Lyapunov–Krasovskii Approaches. Angulo, S., +, TAC July 2020 3164-3169

Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, D., +, *TAC May 2020 2300-2307*

Risk of Collision and Detachment in Vehicle Platooning: Time-Delay– Induced Limitations and Tradeoffs. *Somarakis, C.*, +, *TAC Aug. 2020* 3544-3559

Stability Analysis for a Class of Linear 2 × 2 Hyperbolic PDEs Using a Backstepping Transform. *Bou Saba*, *D.*, +, *TAC July 2020 2941-2956*

Stability Analysis of Linear Coupled Differential-Difference Systems With General Distributed Delays. *Feng*, Q., +, *TAC March 2020 1356-1363*

- Static Sliding Mode Control of Systems With Arbitrary Relative Degree by Using Artificial Delay. Xu, J., +, TAC Dec. 2020 5464-5471
- The Value of Timing Information in Event-Triggered Control. *Khojasteh, M.J.*, +, *TAC March 2020 925-940*

Tracking Control of Nonlinear Networked and Quantized Control Systems With Communication Delays. *Ren, W.*, +, *TAC Aug. 2020 3685-3692*

Demand side management

Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads. *Kim, H.*, +, *TAC Nov. 2020 4887-4894*

Design methodology

Reduced-Order H_∞ Filter Design for Delta Operator Systems Over Multiple Frequency Intervals. Yang, H., +, TAC Dec. 2020 5376-5383

Difference equations

Chandrasekhar-Based Maximum Correntropy Kalman Filtering With the Adaptive Kernel Size Selection. *Kulikova, M.V., TAC Feb. 2020 741-748* On the Existence of the Stabilizing Solution of a Class of Periodic Stochastic Riccati Equations. *Aberkane, S.*, +, *TAC March 2020 1288-1294*

Stability Analysis for a Class of Linear 2 × 2 Hyperbolic PDEs Using a Backstepping Transform. *Bou Saba*, *D.*, +, *TAC July 2020 2941-2956*

Differential algebraic equations

- A Globally Stable Algorithm for the Integration of High-Index Differential-Algebraic Systems. *Franco, P.D.*, +, *TAC May 2020 2107-2122*
- A Stabilization Framework for the Output Regulation of Rational Nonlinear Systems. *Castro, R.d.S.*, +, *TAC Nov. 2020 4860-4865*
- Analysis and Computation of the H_2 Norm of Delay Differential Algebraic Equations. *Gomez, M.A.*, +, *TAC May 2020 2192-2199*

Feedback Nash Equilibrium for Randomly Switching Differential–Algebraic Games. *Tanwani*, A., +, *TAC Aug. 2020 3286-3301*

Differential equations

A Simple Proof of Indefinite Linear-Quadratic Stochastic Optimal Control With Random Coefficients. *Moon, J.*, +, *TAC Dec. 2020 5422-5428*

- A Tool for Analysis of Existence of Equilibria and Voltage Stability in Power Systems With Constant Power Loads. *Matveev, A.S.*, +, *TAC Nov. 2020* 4726-4740
- ADRC Dynamic Stabilization of an Unstable Heat Equation. Zhang, Y, +, TAC Oct. 2020 4424-4429
- Continuous-Time Accelerated Methods via a Hybrid Control Lens. Kolarijani, A.S., +, TAC Aug. 2020 3425-3440
- Feedback Nash Equilibrium for Randomly Switching Differential–Algebraic Games. *Tanwani*, A., +, *TAC Aug. 2020 3286-3301*

Linear Quadratic Mean Field Games: Asymptotic Solvability and Relation to the Fixed Point Approach. *Huang, M., +, TAC April 2020 1397-1412*

- Local Controllability of Single-Input Nonlinear Systems Based on Deterministic Wiener Processes. *Nishimura, Y.,* +, *TAC Jan. 2020 354-360*
- Necessary and Sufficient Conditions for 2pth Moment Stability of Several Classes of Linear Stochastic Systems. *Luo, S.*, +, *TAC July 2020 3084-3091*
- Over-Approximation of Fluid Models. Tschaikowski, M., TAC March 2020 999-1013
- Stabilization of Highly Nonlinear Hybrid Systems by Feedback Control Based on Discrete-Time State Observations. *Fei, C.*, +, *TAC July 2020* 2899-2912

Well-Posedness of Boundary Controlled and Observed Stochastic Port-Hamiltonian Systems. *Lamoline, F.*, +, *TAC Oct. 2020 4258-4264*

Differential games

- Feedback Nash Equilibrium for Randomly Switching Differential–Algebraic Games. *Tanwani*, A., +, *TAC Aug. 2020 3286-3301*
- Inverse Open-Loop Noncooperative Differential Games and Inverse Optimal Control. *Molloy, T.L.*, +, *TAC Feb. 2020 897-904*

On the Existence of the Stabilizing Solution of a Class of Periodic Stochastic Riccati Equations. *Aberkane*, S., +, *TAC March 2020 1288-1294*

Differential geometry

Model Predictive Tracking Control for Invariant Systems on Matrix Lie Groups via Stable Embedding Into Euclidean Spaces. *Chang, D.E., +, TAC* July 2020 3191-3198 Sub-Riemannian Geodesics in *SU(n/S(U(n-1 × U(1))*) and Optimal Control of Three Level Quantum Systems. *Albertini, F., +, TAC March 2020 1176-1191*

Differentiation

- A Finite-Time Local Observer in the Original Coordinates for Nonlinear Control Systems. *Possieri, C.*, +, *TAC Nov. 2020 4808-4815*
- Discrete-Time Implementation of Homogeneous Differentiators. *Koch, S.*, +, *TAC Feb. 2020 757-762*

Diffusion

- Analysis of the Existence of Equilibrium Profiles in Nonisothermal Axial Dispersion Tubular Reactors. *Hastir, A.*, +, *TAC April 2020 1525-1536*
- Feedforward Boundary Control for the Regulation of a Passive and Diffusive Scalar in Two-Dimensional Unsteady Flows. *Liu, W., TAC Nov. 2020* 4882-4886
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*
- Semiexplicit Solutions to Some Nonlinear Nonquadratic Mean-Field-Type Games: A Direct Method. Barreiro-Gomez, J., +, TAC June 2020 2582-2597

Directed graphs

- A Modified Saddle-Point Dynamics for Distributed Convex Optimization on General Directed Graphs. *Touri*, *B.*, +, *TAC July 2020 3098-3103*
- Achieving Linear Convergence in Distributed Asynchronous Multiagent Optimization. *Tian, Y.*, +, *TAC Dec. 2020 5264-5279*
- Asymptotic Behavior of Conjunctive Boolean Networks Over Weakly Connected Digraphs. Chen, X., +, TAC June 2020 2536-2549
- AsySPA: An Exact Asynchronous Algorithm for Convex Optimization Over Digraphs. *Zhang, J.*, +, *TAC June 2020 2494-2509*
- Blind Learning of Tree Network Topologies in the Presence of Hidden Nodes. *Sepehr, F.*, +, *TAC March 2020 1014-1028*
- Clustering-Based Model Reduction of Laplacian Dynamics With Weakly Connected Topology. *Cheng, X.*, +, *TAC Oct. 2020 4393-4399*
- Decentralized Optimization Over Time-Varying Directed Graphs With Row and Column-Stochastic Matrices. *Saadatniaki*, F., +, *TAC Nov. 2020 4769-4780*
- Distributed GNE Seeking Under Partial-Decision Information Over Networks via a Doubly-Augmented Operator Splitting Approach. *Pavel, L., TAC April 2020 1584-1597*
- Distributed Multiagent Convex Optimization Over Random Digraphs. Alaviani, S.S., +, TAC March 2020 986-998
- Dual Averaging Push for Distributed Convex Optimization Over Time-Varying Directed Graph. Liang, S., +, TAC April 2020 1785-1791
- Event-Triggered Control for Semiglobal Robust Consensus of a Class of Nonlinear Uncertain Multiagent Systems. *Meng, H., +, TAC April 2020 1683-1690*
- Extended Structural Balance Theory and Method for Cooperative–Antagonistic Networks. *Meng, D.*, +, *TAC May 2020 2147-2154*
- Finite-Time Stability of Network Systems With Discontinuous Dynamics Over Signed Digraphs. *Shi*, X., +, *TAC Nov. 2020 4874-4881*
- Notions of Centralized and Decentralized Opacity in Linear Systems. Ramasubramanian, B., +, TAC April 2020 1442-1455
- On the Stability of Unverified Transactions in a DAG-Based Distributed Ledger. *Ferraro*, P., +, *TAC Sept. 2020 3772-3783*
- Online Distributed Optimization With Strongly Pseudoconvex-Sum Cost Functions. Lu, K., +, TAC Jan. 2020 426-433
- Privacy-Preserving Distributed Averaging via Homomorphically Encrypted Ratio Consensus. *Hadjicostis, C.N.*, +, *TAC Sept. 2020 3887-3894*
- Push-Sum on Random Graphs: Almost Sure Convergence and Convergence Rate. *Rezaienia*, P., +, *TAC March 2020 1295-1302*

Discrete event systems

- An Approach to Improve Permissiveness of Supervisors for GMECs in Time Petri Net Systems. *Li*, *L.*, +, *TAC Jan. 2020 237-251*
- Compositional and Abstraction-Based Approach for Synthesis of Edit Functions for Opacity Enforcement. *Mohajerani, S.*, +, *TAC Aug. 2020 3349-3364*
- Compositional Supervisory Control via Reactive Synthesis and Automated Planning. Ciolek, D.A., +, TAC Aug. 2020 3502-3516

- Critical Observability for Automata and Petri Nets. Masopust, T., TAC Jan. 2020 341-346
- Marking Estimation in a Class of Time Labeled Petri Nets. Ma, Z., +, TAC Feb. 2020 493-506
- Opacity Enforcement for Confidential Robust Control in Linear Cyber-Physical Systems. An, L., +, TAC March 2020 1234-1241
- Relative Network Observability and Its Relation With Network Observability. *Hou, Y.*, +, *TAC Aug. 2020 3584-3591*
- Structural Controller for Logical Expression of Linear Constraints on Petri Nets. *Luo*, *J.*, +, *TAC Jan. 2020 397-403*
- Structuring Multilevel Discrete-Event Systems With Dependence Structure Matrices. *Goorden, M.*, +, *TAC April 2020 1625-1639*
- Supervisor Localization of Timed Discrete-Event Systems Under Partial Observation. Zhang, R., +, TAC Jan. 2020 295-301
- Synthesis of Dynamic Masks for Infinite-Step Opacity. Yin, X., +, TAC April 2020 1429-1441

Discrete systems

- Hybrid Control for Robust and Global Tracking on Smooth Manifolds. Casau, P., +, TAC May 2020 1870-1885
- Hybrid Systems With Delayed Jumps: Asymptotic Stability via Robustness and Lyapunov Conditions. *Altin, B., +, TAC Aug. 2020 3381-3396*
- Input-to-State Stability of Time-Delay Systems With Delay-Dependent Impulses. *Liu*, *X*., +, *TAC April 2020 1676-1682*
- Optimal Control of Polynomial Hybrid Systems via Convex Relaxations. Zhao, P., +, TAC May 2020 2062-2077
- Structural Characterization of Linear Quantum Systems With Application to Back-Action Evading Measurement. *Zhang, G.*, +, *TAC July 2020 3157-3163*
- Sub-Riemannian Geodesics in *SU*(*n/S*(*U*(*n*-1×*U*(1)) and Optimal Control of Three Level Quantum Systems. *Albertini*, *F*, +, *TAC March 2020 1176-1191*

Discrete time filters

Unbiased FIR Filtering for Time-Stamped Discretely Delayed and Missing Data. Uribe-Murcia, K.J., +, TAC May 2020 2155-2162

Discrete time systems

- A Detector-Based Approach for the Constrained Quadratic Control of Discrete-Time Markovian Jump Linear Systems. Zabala, Y.A., +, TAC March 2020 1211-1217
- A Set-Membership Approach to Event-Triggered Filtering for General Nonlinear Systems Over Sensor Networks. *Ding, D.*, +, *TAC April 2020 1792-1799*
- A Simplified Approach to Analyze Complementary Sensitivity Tradeoffs in Continuous-Time and Discrete-Time Systems. *Wan, N.*, +, *TAC April 2020 1697-1703*
- Almost Global Stability of Nonlinear Switched Systems With Time-Dependent Switching. *Karabacak, O.*, +, *TAC July 2020 2969-2978*
- An *H_i*/*H*_∞ Optimization Approach to Event-Triggered Fault Detection for Linear Discrete Time Systems. *Zhong, M.*, +, *TAC Oct. 2020 4464-4471*
- An Adaptive Gaussian Sum Kalman Filter Based on a Partial Variational Bayesian Method. *Xu*, *H.*, +, *TAC Nov. 2020 4793-4799*
- An Iterative Learning Control Algorithm With Gain Adaptation for Stochastic Systems. Shen, D., +, TAC March 2020 1280-1287
- Asymptotic Optimality of Finite Model Approximations for Partially Observed Markov Decision Processes With Discounted Cost. Saldi, N., +, TAC Jan. 2020 130-142
- Asymptotic Stability Analysis of Discrete-Time Switched Cascade Nonlinear Systems With Delays. *Liu*, *X*., +, *TAC June 2020 2686-2692*
- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
- Codesign of Event Trigger and Feedback Policy in Robust Model Predictive Control. *Liu*, *C*., +, *TAC Jan. 2020 302-309*
- Completely Decentralized Design of Distributed Observer for Linear Systems. *Kim, T.*, +, *TAC Nov. 2020 4664-4678*
- Computing Optimal Control of Cascading Failure in DC Networks. *Ba*, *Q*., +, *TAC June 2020 2402-2417*

- Constrained Adaptive Model-Predictive Control for a Class of Discrete-Time Linear Systems With Parametric Uncertainties. *Zhu, B., +, TAC May 2020* 2223-2229
- Continuous-Time and Sampled-Data Stabilizers for Nonlinear Systems With Input and Measurement Delays. *Battilotti, S., TAC April 2020 1568-1583*
- Converse Optimality for Discrete-Time Systems. Gohrt, T., +, TAC May 2020 2257-2264
- Convex Searches for Discrete-Time Zames–Falb Multipliers. Carrasco, J., +, TAC Nov. 2020 4538-4553
- Discrete-Time Implementation of Homogeneous Differentiators. Koch, S., +, TAC Feb. 2020 757-762
- Discrete-Time Sliding-Mode Control With a Desired Switching Variable Generator. *Bartoszewicz, A., +, TAC April 2020 1807-1814*
- Discrete-Time Systems With Constrained Time Delays and Delay-Dependent Lyapunov Functions. *Pepe, P., TAC April 2020 1724-1730*
- Distributed Consensus Over Markovian Packet Loss Channels. Xu, L., +, TAC Jan. 2020 279-286
- Energy-Efficient Time-Triggered Communication Policies for Wireless Networked Control Systems. Varma, V.S., +, TAC Oct. 2020 4324-4331
- Event-Triggered Discrete-Time Cubature Kalman Filter for Nonlinear Dynamical Systems With Packet Dropout. *Kooshkbaghi, M.*, +, *TAC May* 2020 2278-2285
- Finite-Time Sliding-Mode Control of Markovian Jump Cyber-Physical Systems Against Randomly Occurring Injection Attacks. Cao, Z., +, TAC March 2020 1264-1271
- Gradient Flow Algorithms for Density Propagation in Stochastic Systems. *Caluya, K.F.*, +, *TAC Oct. 2020 3991-4004*
- Hankel Singular Values and LQG Characteristic Values of Discrete-Time Linear Systems in Cascade With Inner Systems. Bucolo, M., +, TAC Nov. 2020 4989-4994
- Koopman-Based Lifting Techniques for Nonlinear Systems Identification. Mauroy, A., +, TAC June 2020 2550-2565
- Lebesgue-Approximation Model Predictive Control of Nonlinear Sampled-Data Systems. *Tao, J.*, +, *TAC Oct. 2020 4047-4060*
- Lyapunov Criterion for Stochastic Systems and Its Applications in Distributed Computation. *Qin*, *Y*, +, *TAC Feb. 2020 546-560*
- Lyapunov Event-Triggered Stabilization With a Known Convergence Rate. Proskurnikov, A.V., +, TAC Feb. 2020 507-521
- Lyapunov Stability Analysis of the Implicit Discrete-Time Twisting Control Algorithm. *Huber, O., +, TAC June 2020 2619-2626*
- Markov Chains With Maximum Return Time Entropy for Robotic Surveillance. Duan, X., +, TAC Jan. 2020 72-86
- Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints. *Zhu*, *Y*, +, *TAC May 2020 2177-2184*
- New Gramians for Switched Linear Systems: Reachability, Observability, and Model Reduction. *Pontes Duff, I.*, +, *TAC June 2020 2526-2535*
- Notions of Centralized and Decentralized Opacity in Linear Systems. Ramasubramanian, B., +, TAC April 2020 1442-1455
- Observed-Mode-Dependent State Estimation of Hidden Semi-Markov Jump Linear Systems. *Cai, B.,* +, *TAC Jan. 2020 442-449*
- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y.*, +, *TAC Aug. 2020 3714-3721*
- On the Event-Triggered Controller Design. Ghodrat, M., +, TAC Oct. 2020 4122-4137
- On the Existence and Design of Functional Observers. Darouach, M., +, TAC June 2020 2751-2759
- On the Existence of the Stabilizing Solution of a Class of Periodic Stochastic Riccati Equations. *Aberkane, S.*, +, *TAC March 2020 1288-1294*
- On the Stability Bounds of Kalman Filters for Linear Deterministic Discrete-Time Systems. *Haring, M.*, +, *TAC Oct. 2020 4434-4439*
- Optimal Continuous-Discrete Linear Filter and Moment Equations for Nonlinear Diffusions. Cacace, F., +, TAC Oct. 2020 3961-3976

Output Admissible Sets and Reference Governors: Saturations Are Not Constraints!. Cotorruelo, A., +, TAC March 2020 1192-1196

- Preserving and Achieving Passivity-Short Property Through Discretization. Joo, Y., +, TAC Oct. 2020 4265-4272
- Resilient Leader-Follower Consensus to Arbitrary Reference Values in Time-Varying Graphs. Usevitch, J., +, TAC April 2020 1755-1762
- Riemannian Optimal Identification Method for Linear Systems With Symmetric Positive-Definite Matrix. Sato, K., +, TAC Nov. 2020 4493-4508
- Self-Learning Optimal Regulation for Discrete-Time Nonlinear Systems Under Event-Driven Formulation. *Wang, D.*, +, *TAC March 2020 1272-1279*
- Semi-Markov Jump Linear Systems With Incomplete Sojourn and Transition Information: Analysis and Synthesis. Ning, Z., +, TAC Jan. 2020 159-174
- Set-Valued Feedback Control and Its Application to Event-Triggered Sampled-Data Systems. *Jiang, Y.*, +, *TAC Nov. 2020 4965-4972*
- Stabilization of Highly Nonlinear Hybrid Systems by Feedback Control Based on Discrete-Time State Observations. *Fei, C.*, +, *TAC July 2020* 2899-2912
- Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907
- The Implicit Discretization of the Supertwisting Sliding-Mode Control Algorithm. Brogliato, B., +, TAC Aug. 2020 3707-3713

Toward a Comprehensive Impossibility Result for String Stability. *Farnam, A.*, +, *TAC April 2020 1652-1659*

Discrete-event systems

- Control of Nondeterministic Systems for Bisimulation Equivalence Under Partial Information. *Farhat, H., TAC Dec. 2020 5437-5443*
- Design of Supervisors for Active Diagnosis in Discrete Event Systems. *Hu*, *Y*, +, *TAC Dec. 2020 5159-5172*
- On Liveness Enforcing Supervisory Policies for Arbitrary Petri Nets. *Chen, C.*, +, *TAC Dec. 2020 5236-5247*
- Discrete-time systems
 - A Note on Relative Controllability of Higher Order Linear Delayed Discrete Systems. *Diblik, J.*, +, *TAC Dec. 2020 5472-5479*
 - Accurate Uncertainty Propagation for Discrete-Time Nonlinear Systems Using Differential Inequalities With Model Redundancy. *Yang, X.*, +, *TAC Dec. 2020 5043-5057*
 - Mean-Square Exponential Stability for Stochastic Control Systems With Discrete-Time State Feedbacks and Their Numerical Schemes in Simulation. *Liu*, *L.*, +, *TAC Dec. 2020 5384-5391*
 - Stability Analysis of Discrete-Time Semi-Markov Jump Linear Systems. Wang, B., +, TAC Dec. 2020 5415-5421

Diseases

- Distributed Coupled Multiagent Stochastic Optimization. *Alghunaim, S.A.*, +, *TAC Jan. 2020 175-190*
- Robust Economic Model Predictive Control of Continuous-Time Epidemic Processes. *Watkins, N.J.*, +, *TAC March 2020 1116-1131*

Distributed algorithms

- A Fast Distributed Asynchronous Newton-Based Optimization Algorithm. Mansoori, F., +, TAC July 2020 2769-2784
- Achieving Linear Convergence in Distributed Asynchronous Multiagent Optimization. *Tian, Y.*, +, *TAC Dec. 2020 5264-5279*
- Cooperative Data-Driven Distributionally Robust Optimization. *Cherukuri, A.*, +, *TAC Oct. 2020 4400-4407*
- Decentralized Optimization Over Time-Varying Directed Graphs With Row and Column-Stochastic Matrices. *Saadatniaki, F.*, +, *TAC Nov. 2020 4769-4780*
- Distributed GNE Seeking Under Partial-Decision Information Over Networks via a Doubly-Augmented Operator Splitting Approach. *Pavel, L., TAC April 2020 1584-1597*
- Distributed Learning Over Networks: Effect of Using Historical Observations. Shi, C., +, TAC Dec. 2020 5503-5509
- Distributed Mixed-Integer Linear Programming via Cut Generation and Constraint Exchange. Testa, A., +, TAC April 2020 1456-1467
- Distributed Smooth Convex Optimization With Coupled Constraints. *Liang*, S., +, TAC Jan. 2020 347-353
- Distributed Time-Varying Convex Optimization for a Class of Nonlinear Multiagent Systems. *Huang, B.,* +, *TAC Feb. 2020 801-808*
- Finite-Time Distributed Linear Equation Solver for Solutions With Minimum l₁-Norm. Zhou, J., +, TAC April 2020 1691-1696

- Guest Editorial: Special Issue on Security and Privacy of Distributed Algorithms and Network Systems. *Chen, Z.*, +, *TAC Sept. 2020 3725-3727*
- Input–Output Performance of Linear–Quadratic Saddle-Point Algorithms With Application to Distributed Resource Allocation Problems. *Simpson-Porco*, J.W., +, TAC May 2020 2032-2045
- Leader–Follower Network Aggregative Game With Stochastic Agents' Communication and Activeness. *Shokri, M.*, +, *TAC Dec. 2020 5496-5502*
- Privacy-Preserving Distributed Averaging via Homomorphically Encrypted Ratio Consensus. *Hadjicostis, C.N.*, +, *TAC Sept. 2020 3887-3894*
- Randomized Gradient-Free Distributed Optimization Methods for a Multiagent System With Unknown Cost Function. *Pang, Y*, +, *TAC Jan. 2020 333-340*
- Scalable, Distributed Algorithms for Solving Linear Equations via Double-Layered Networks. Wang, X., +, TAC March 2020 1132-1143

Distributed control

- A Distributed Framework fork-hop Control Strategies in Large-Scale Networks Based on Local Interactions. *Gasparri, A.*, +, *TAC May 2020 1825-1840*
- A Modified Saddle-Point Dynamics for Distributed Convex Optimization on General Directed Graphs. *Touri, B.,* +, *TAC July 2020 3098-3103*
- A Suboptimality Approach to Distributed Linear Quadratic Optimal Control. Jiao, J., +, TAC March 2020 1218-1225
- Consensus of Linear Multiagent Systems With Distributed Infinite Transmission Delays: A Low Gain Approach. Xu, X., +, TAC Feb. 2020 809-816
- Distributed Consensus Observer for Multiagent Systems With High-Order Integrator Dynamics. Zuo, Z., +, TAC April 2020 1771-1778
- Distributed Consensus Over Markovian Packet Loss Channels. Xu, L., +, TAC Jan. 2020 279-286
- Distributed Coupled Multiagent Stochastic Optimization. Alghunaim, S.A., +, TAC Jan. 2020 175-190
- Distributed Event-Triggered Gradient Method for Constrained Convex Minimization. Liu, C., +, TAC Feb. 2020 778-785
- Distributed Leader–Follower Affine Formation Maneuver Control for High-Order Multiagent Systems. Chen, L., +, TAC Nov. 2020 4941-4948
- Distributed Model Predictive Control for Linear Systems With Adaptive Terminal Sets. Darivianakis, G., +, TAC March 2020 1044-1056
- Distributed Optimal Coordination for Heterogeneous Linear Multiagent Systems With Event-Triggered Mechanisms. *Li*, *Z.*, +, *TAC April 2020 1763-1770*
- Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads. *Kim, H.,* +, *TAC Nov. 2020 4887-4894*
- Distributed Time-Varying Convex Optimization for a Class of Nonlinear Multiagent Systems. *Huang, B.,* +, *TAC Feb. 2020 801-808*
- Event-Triggered Bipartite Consensus for Multiagent Systems: A Zeno-Free Analysis. Yu, H., +, TAC Nov. 2020 4866-4873
- Event-Triggered Control for Semiglobal Robust Consensus of a Class of Nonlinear Uncertain Multiagent Systems. *Meng, H.*, +, *TAC April 2020* 1683-1690
- Finite-Time Distributed Linear Equation Solver for Solutions With Minimum *l*₁-Norm. *Zhou, J.*, +, *TAC April 2020 1691-1696*
- Fully Distributed Resilient State Estimation Based on Distributed Median Solver. Lee, J.G., +, TAC Sept. 2020 3935-3942
- Leader-Following Attitude Consensus of Multiple Rigid Spacecraft Systems Under Switching Networks. Lu, M., +, TAC Feb. 2020 839-845
- Leader-Following Consensus for a Class of Multiple Robot Manipulators over Switching Networks by Distributed Position Feedback Control. *He*, *C.*, +, *TAC Feb. 2020 890-896*
- Leader-Following Consensus for Linear Multiagent Systems via Asynchronous Sampled-Data Control. Liu, W., +, TAC July 2020 3215-3222
- Learning-Based Event-Triggered Control for Synchronization of Passive Multiagent Systems Under Attack. *Rahnama*, A., +, *TAC Oct. 2020 4170-*4185
- Malicious Attacks on State Estimation Against Distributed Control Systems. Lu, A., +, TAC Sept. 2020 3911-3918
- Minimum-Energy Distributed Consensus Control of Multiagent Systems: A Network Approximation Approach. Chen, F., +, TAC March 2020 1144-1159

- On Structured Lyapunov Functions and Dissipativity in Interconnected LTI Systems. Jokic, A., +, TAC March 2020 970-985
- Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401
- Quaternion-Valued Distributed Filtering and Control. Talebi, S.P., +, TAC Oct. 2020 4246-4257
- RBFNN-Based Minimum Entropy Filtering for a Class of Stochastic Nonlinear Systems. Yin, X., +, TAC Jan. 2020 376-381
- Resilient Output Containment of Heterogeneous Cooperative and Adversarial Multigroup Systems. Zuo, S., +, TAC July 2020 3104-3111
- Robust Cooperative Output Regulation of Heterogeneous Uncertain Linear Multiagent Systems With Time-Varying Communication Topologies. *Wang, L.*, +, *TAC Oct. 2020 4340-4347*
- Solutions for Multiagent Pursuit-Evasion Games on Communication Graphs: Finite-Time Capture and Asymptotic Behaviors. *Lopez, V.G.*, +, *TAC May 2020 1911-1923*
- Supervisor Localization of Timed Discrete-Event Systems Under Partial Observation. Zhang, R., +, TAC Jan. 2020 295-301

Distributed databases

- On the Stability of Unverified Transactions in a DAG-Based Distributed Ledger. *Ferraro*, *P*., +, *TAC Sept. 2020 3772-3783*
- Distributed decision making
 - Distributed GNE Seeking Under Partial-Decision Information Over Networks via a Doubly-Augmented Operator Splitting Approach. *Pavel, L., TAC April 2020 1584-1597*

Distributed parameter systems

- ADRC Dynamic Stabilization of an Unstable Heat Equation. Zhang, Y, +, TAC Oct. 2020 4424-4429
- An LMI Approach to Stability Analysis of Coupled Parabolic Systems. Wakaiki, M., TAC Jan. 2020 404-411
- Approximate Controllability and Approximate Observability of Singular Distributed Parameter Systems. *Ge*, *Z*., +, *TAC May 2020 2294-2299*
- Backstepping-Based Estimation of Thermoacoustic Oscillations in a Rijke Tube With Experimental Validation. *de Andrade, G.A.*, +, *TAC Dec. 2020* 5336-5343
- Dissipativity Properties of Nonlinear Systems Under Network Constraints. Ghodrat, M., +, TAC June 2020 2708-2715
- Feedforward Boundary Control for the Regulation of a Passive and Diffusive Scalar in Two-Dimensional Unsteady Flows. *Liu, W., TAC Nov. 2020* 4882-4886
- Input-to-State Stability of a Clamped-Free Damped String in the Presence of Distributed and Boundary Disturbances. *Lhachemi, H.*, +, *TAC March* 2020 1248-1255
- On the Stabilization of an Overhead Crane System With Dynamic and Delayed Boundary Conditions. *Chentouf, B.,* +, *TAC Oct. 2020 4273-4280*
- Performance Output Tracking for Multidimensional Heat Equation Subject to Unmatched Disturbance and Noncollocated Control. *Zhou, H.*, +, *TAC May 2020 1940-1955*
- Reduced Order Controller Design for Robust Output Regulation. *Paunonen*, L., +, *TAC June 2020 2480-2493*
- Stability Analysis for a Class of Linear 2 × 2 Hyperbolic PDEs Using a Backstepping Transform. *Bou Saba*, *D.*, +, *TAC July 2020 2941-2956*

Distributed power generation

- A Distributed Cyber-Attack Detection Scheme With Application to DC Microgrids. *Gallo, A.J.*, +, *TAC Sept. 2020 3800-3815*
- A Tool for Analysis of Existence of Equilibria and Voltage Stability in Power Systems With Constant Power Loads. *Matveev, A.S.*, +, *TAC Nov. 2020* 4726-4740
- Design of Privacy-Preserving Dynamic Controllers. Kawano, Y., +, TAC Sept. 2020 3863-3878
- On the Dynamics of Distributed Energy Adoption: Equilibrium, Stability, and Limiting Capacity. Sun, T., +, TAC Jan. 2020 102-114
- Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401
- **Distributed processing**
 - Distributed Mechanism Design With Learning Guarantees for Private and Public Goods Problems. *Sinha, A., +, TAC Oct. 2020 4106-4121*

Distributed sensors

Quaternion-Valued Distributed Filtering and Control. Talebi, S.P., +, TAC Oct. 2020 4246-4257

Distribution networks

- Detection of Covert Cyber-Attacks in Interconnected Systems: A Distributed Model-Based Approach. *Barboni*, A., +, *TAC Sept. 2020 3728-3741*
- Disturbance observers
- Distributed Finite-Time Optimization for Integrator Chain Multiagent Systems With Disturbances. *Wang, X., +, TAC Dec. 2020 5296-5311*

Dynamic programming

- A Proof on Equivalence of Stagewise Newton and Dreyfus's Successive Approximation Procedures. *Mizutani, E., TAC June 2020 2716-2723*
- A Simple Proof of Indefinite Linear-Quadratic Stochastic Optimal Control With Random Coefficients. *Moon, J.*, +, *TAC Dec. 2020 5422-5428*
- A Universal Empirical Dynamic Programming Algorithm for Continuous State MDPs. *Haskell, W.B.*, +, *TAC Jan. 2020 115-129*
- Combining Pontryagin's Principle and Dynamic Programming for Linear and Nonlinear Systems. Sassano, M., +, TAC Dec. 2020 5312-5327
- Computation of Admissible Marking Sets in Weighted Synchronization-Free Petri Nets by Dynamic Programming. *Ma*, *Z*., +, *TAC June 2020 2662-2669*
- Control of Continuous-Time Linear Systems With Markov Jump Parameters in Reverse Time. Narvaez, A.R.R., +, TAC May 2020 2265-2271
- Deep Teams: Decentralized Decision Making With Finite and Infinite Number of Agents. *Arabneydi*, J., +, *TAC Oct. 2020 4230-4245*
- Minimum Cost Feedback Selection in Structured Systems: Hardness and Approximation Algorithm. *Joshi, A.*, +, *TAC Dec. 2020 5517-5524*

On the Performance Analysis of Reset Attack in Cyber-Physical Systems. *Ni*, *Y*, +, *TAC Jan. 2020 419-425*

- Optimal Local and Remote Controllers With Unreliable Uplink Channels: An Elementary Proof. *Afshari, M.*, +, *TAC Aug. 2020 3616-3622*
- Performance Guarantees for Model-Based Approximate Dynamic Programming in Continuous Spaces. Beuchat, P.N., +, TAC Jan. 2020 143-158
- Remote Estimation Over a Packet-Drop Channel With Markovian State. Chakravorty, J., +, TAC May 2020 2016-2031
- Self-Learning Optimal Regulation for Discrete-Time Nonlinear Systems Under Event-Driven Formulation. *Wang, D.*, +, *TAC March 2020 1272-1279*
- Stochastic Control Approach to Reputation Games. Dalkiran, N.A., +, TAC Nov. 2020 4710-4725
- Stochastic Control Framework for Determining Feasible Alternatives in Sampling Allocation. *Peng, Y., +, TAC June 2020 2647-2653*

Dynamical symmetry

Asymptotic Behavior and Collision Avoidance in the Cucker–Smale Model. Yin, X., +, TAC July 2020 3112-3119

Dynamical systems

- Efficient Verification of Observability and Reconstructibility for Large Boolean Control Networks With Special Structures. *Zhang, K.*, +, *TAC Dec. 2020 5144-5158*
- Equivalence-Based Model of Dimension-Varying Linear Systems. Cheng, D., +, TAC Dec. 2020 5444-5449
- Minimum Cost Feedback Selection in Structured Systems: Hardness and Approximation Algorithm. Joshi, A., +, TAC Dec. 2020 5517-5524

On Liveness Enforcing Supervisory Policies for Arbitrary Petri Nets. *Chen, C.*, +, *TAC Dec. 2020 5236-5247*

E

Economics

Utility Design for Distributed Resource Allocation—Part I: Characterizing and Optimizing the Exact Price of Anarchy. *Paccagnan, D.*, +, *TAC Nov.* 2020 4616-4631

Econophysics

On Positive Solutions of a Delay Equation Arising When Trading in Financial Markets. *Hsieh, C.*, +, *TAC July 2020 3143-3149*

Eigenvalues and eigenfunctions

A Suboptimality Approach to Distributed Linear Quadratic Optimal Control. Jiao, J., +, TAC March 2020 1218-1225

- ADRC Dynamic Stabilization of an Unstable Heat Equation. Zhang, Y, +, TAC Oct. 2020 4424-4429
- Consensus of Linear Multiagent Systems With Distributed Infinite Transmission Delays: A Low Gain Approach. Xu, X., +, TAC Feb. 2020 809-816
- Decentralized Optimization Over Time-Varying Directed Graphs With Row and Column-Stochastic Matrices. *Saadatniaki*, F., +, *TAC Nov. 2020 4769-4780*
- Distributed Heavy-Ball: A Generalization and Acceleration of First-Order Methods With Gradient Tracking. Xin, R., +, TAC June 2020 2627-2633
- Exponential Stability of a Schrödinger Equation Through Boundary Coupling a Wave Equation. *Wang*, J., +, *TAC July 2020 3136-3142*
- Heterogeneous Hegselmann–Krause Dynamics With Environment and Communication Noise. Chen, G., +, TAC Aug. 2020 3409-3424
- On the Event-Triggered Controller Design. Ghodrat, M., +, TAC Oct. 2020 4122-4137
- On the Positive Effect of Delay on the Rate of Convergence of a Class of Linear Time-Delayed Systems. *Moradian, H.,* +, *TAC Nov. 2020 4832-4839*
- On the Stabilization of an Overhead Crane System With Dynamic and Delayed Boundary Conditions. *Chentouf, B.*, +, *TAC Oct. 2020 4273-4280*
- Optimal Construction of Koopman Eigenfunctions for Prediction and Control. *Korda, M.*, +, *TAC Dec. 2020 5114-5129*
- Riemannian Optimal Identification Method for Linear Systems With Symmetric Positive-Definite Matrix. Sato, K., +, TAC Nov. 2020 4493-4508
- Singularities and Moments of Nonlinear Systems. Padoan, A., +, TAC Aug. 2020 3647-3654
- Stabilization of Nonlinear Dynamic Systems Over Limited Capacity Communication Channels. Sanjaroon, V., +, TAC Aug. 2020 3655-3662
- Stochastic Artificial Potentials for Online Safe Navigation. Paternain, S., +, TAC May 2020 1985-2000

Elastic constants

Principles of Lossless Adjustable One-Ports. Georgiou, T.T., +, TAC Jan. 2020 252-262

Encoding

Stabilization of Nonlinear Dynamic Systems Over Limited Capacity Communication Channels. *Sanjaroon, V.*, +, *TAC Aug. 2020 3655-3662*

Energy conservation

Energy-Efficient Time-Triggered Communication Policies for Wireless Networked Control Systems. Varma, V.S., +, TAC Oct. 2020 4324-4331

Energy storage

Minimal Series–Parallel Network Realizations of Bicubic Impedances. Hughes, T.H., TAC Dec. 2020 4997-5011

Entropy

- A Moving Target Defense Control Framework for Cyber-Physical Systems. Kanellopoulos, A., +, TAC March 2020 1029-1043
- Entropy Maximization for Markov Decision Processes Under Temporal Logic Constraints. Savas, Y., +, TAC April 2020 1552-1567
- Markov Chains With Maximum Return Time Entropy for Robotic Surveillance. Duan, X., +, TAC Jan. 2020 72-86
- Metric and Topological Entropy Bounds for Optimal Coding of Stochastic Dynamical Systems. *Kawan, C.*, +, *TAC June 2020 2466-2479*
- Stochastic Control and Nonequilibrium Thermodynamics: Fundamental Limits. Chen, Y., +, TAC July 2020 2979-2991
- The Value of Timing Information in Event-Triggered Control. *Khojasteh*, M.J., +, TAC March 2020 925-940

Enzymes

Fundamental Limits and Tradeoffs in Autocatalytic Pathways. Siami, M., +, TAC Feb. 2020 733-740

Epidemics

Robust Economic Model Predictive Control of Continuous-Time Epidemic Processes. *Watkins, N.J.*, +, *TAC March 2020 1116-1131*

Equivalence classes

Transforming Opacity Verification to Nonblocking Verification in Modular Systems. Mohajerani, S., +, TAC April 2020 1739-1746

Error analysis

Continuous-Time Model Identification From Filtered Sampled Data: Error Analysis. *Hu, X.*, +, *TAC Oct. 2020 4005-4015*

Error correction

Interval Error Correction Auxiliary Model Based Gradient Iterative Algorithms for Multirate ARX Models. *Chen, J.*, +, *TAC Oct. 2020 4385-4392*

- Estimation error
 - Moving Horizon Estimation With Unknown Inputs Under Dynamic Quantization Effects. Zou, L., +, TAC Dec. 2020 5368-5375

Estimation theory

- A Smooth Double Proximal Primal-Dual Algorithm for a Class of Distributed Nonsmooth Optimization Problems. *Wei*, *Y*, +, *TAC April 2020 1800-1806*
- Observers and Disturbance Rejection Control for a Heat Equation. Feng, H., +, TAC Nov. 2020 4957-4964
- Secure State Estimation With Byzantine Sensors: A Probabilistic Approach. *Ren, X.*, +, *TAC Sept. 2020 3742-3757*
- State-Secrecy Codes for Networked Linear Systems. Tsiamis, A., +, TAC May 2020 2001-2015

Evolutionary computation

Steady State Analysis of Flexible Nets. Julvez, J., +, TAC June 2020 2510-2525

Exponential distribution

Heterogeneous Hegselmann–Krause Dynamics With Environment and Communication Noise. Chen, G., +, TAC Aug. 2020 3409-3424

F

Facility location

Pointing Consensus and Bearing-Based Solutions to the Fermat–Weber Location Problem. *Trinh, M.H.,* +, *TAC June 2020 2339-2354*

Fading channels

Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907

Fault diagnosis

- An H_i/H_{∞} Optimization Approach to Event-Triggered Fault Detection for Linear Discrete Time Systems. *Zhong, M.*, +, *TAC Oct. 2020* 4464-4471
- Design of Supervisors for Active Diagnosis in Discrete Event Systems. *Hu*, *Y*, +, *TAC Dec. 2020 5159-5172*

On Unknown Input Observers of Linear Systems: Asymptotic Unknown Input Decoupling Approach. Ichalal, D., +, TAC March 2020 1197-1202

Fault tolerant computing

- Finite-Time Guarantees for Byzantine-Resilient Distributed State Estimation With Noisy Measurements. Su, L., +, TAC Sept. 2020 3758-3771
- Robustness of Interdependent Cyber-Physical Systems Against Cascading Failures. Zhang, Y., +, TAC Feb. 2020 711-726

Feedback

- "Class-Type" Identification-Based Internal Models in Multivariable Nonlinear Output Regulation. Bin, M., +, TAC Oct. 2020 4369-4376
- A Detector-Based Approach for the Constrained Quadratic Control of Discrete-Time Markovian Jump Linear Systems. Zabala, Y.A., +, TAC March 2020 1211-1217
- A Globally Stable Algorithm for the Integration of High-Index Differential-Algebraic Systems. *Franco*, *P.D.*, +, *TAC May 2020 2107-2122*
- A Nonlinear Model Predictive Control Framework Using Reference Generic Terminal Ingredients. *Kohler, J.*, +, *TAC Aug. 2020 3576-3583*
- A Simplified Approach to Analyze Complementary Sensitivity Tradeoffs in Continuous-Time and Discrete-Time Systems. *Wan, N.*, +, *TAC April 2020 1697-1703*
- Adaptive Control by Regulation-Triggered Batch Least Squares. *Karafyllis, I.*, +, *TAC July 2020 2842-2855*
- Adaptive Control for a Class of Multi-Input Multi-Output Plants With Arbitrary Relative Degree. Qu, Z., +, TAC July 2020 3023-3038
- Adaptive Error Feedback Regulator Design for One-Dimensional Heat Equation With Unknown Harmonic Disturbance Anticollocated With Control. *Guo, W.*, +, *TAC Feb. 2020 824-830*
- Adding Integral Action for Open-Loop Exponentially Stable Semigroups and Application to Boundary Control of PDE Systems. *Terrand-Jeanne*, *A.*, +, *TAC Nov. 2020 4481-4492*
- ADRC Dynamic Stabilization of an Unstable Heat Equation. Zhang, Y., +, TAC Oct. 2020 4424-4429

- Almost Sure Stability of Nonlinear Systems Under Random and Impulsive Sequential Attacks. *He, W.*, +, *TAC Sept. 2020 3879-3886*
- Analysis of Systems With Slope Restricted Nonlinearities Using Externally Positive Zames–Falb Multipliers. *Turner, M.C.*, +, *TAC April 2020 1660-1667*
- Analysis of Two-Dimensional Feedback Systems Over Networks Using Dissipativity. Yan, Y., +, TAC Aug. 2020 3241-3255
- Codesign of Event Trigger and Feedback Policy in Robust Model Predictive Control. *Liu*, *C.*, +, *TAC Jan. 2020 302-309*
- Collective Stochastic Discrete Choice Problems: A Min-LQG Dynamic Game Formulation. *Salhab, R., +, TAC Aug. 2020 3302-3316*
- Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty. *Zheng, X*., +, *TAC March 2020 1310-1317*
- Continuous-Time Accelerated Methods via a Hybrid Control Lens. Kolarijani, A.S., +, TAC Aug. 2020 3425-3440
- Continuous-Time and Sampled-Data Stabilizers for Nonlinear Systems With Input and Measurement Delays. *Battilotti, S., TAC April 2020 1568-1583*
- Decentralized Goal Assignment and Safe Trajectory Generation in Multirobot Networks via Multiple Lyapunov Functions. *Panagou, D.*, +, *TAC Aug. 2020 3365-3380*
- Delay-Tolerant Adaptive Robust Tracking Control of Uncertain Time-Delay Systems. Nandiganahalli, J.S., +, TAC Feb. 2020 695-710
- Disturbance Attenuation by Measurement Feedback in Nonlinear Systems via Immersion and Algebraic Conditions. *Mylvaganam, T., +, TAC Feb.* 2020 854-860
- Equilibrium Solutions of Multiperiod Mean-Variance Portfolio Selection. Ni, Y., +, TAC April 2020 1716-1723
- Event-Triggered Dynamic Output Feedback Control for Switched Systems With Frequent Asynchronism. *Fei, Z.,* +, *TAC July 2020 3120-3127*
- Exponential Stabilization of Port-Hamiltonian Boundary Control Systems via Energy Shaping. *Macchelli, A., +, TAC Oct. 2020 4440-4447*
- Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning. Umlauft, J., +, TAC Oct. 2020 4154-4169
- Feedback Nash Equilibrium for Randomly Switching Differential-Algebraic Games. Tanwani, A., +, TAC Aug. 2020 3286-3301
- Feedforward Boundary Control for the Regulation of a Passive and Diffusive Scalar in Two-Dimensional Unsteady Flows. *Liu, W., TAC Nov. 2020* 4882-4886
- Formulas for Data-Driven Control: Stabilization, Optimality, and Robustness. *De Persis, C.*, +, *TAC March 2020 909-924*
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*
- Input–Output Performance of Linear–Quadratic Saddle-Point Algorithms With Application to Distributed Resource Allocation Problems. *Simpson-Porco, J.W.*, +, *TAC May 2020 2032-2045*
- Integral Control of Stable Negative-Imaginary Systems Preceded by Hysteresis Nonlinearity. *Dey, A.*, +, *TAC March 2020 1333-1339*
- Integral Input-to-State Stability of Networked Control Systems. Noroozi, N., +, TAC March 2020 1203-1210
- Leader-Following Consensus for a Class of Multiple Robot Manipulators over Switching Networks by Distributed Position Feedback Control. *He*, *C.*, +, *TAC Feb. 2020 890-896*
- Learning-Based Event-Triggered Control for Synchronization of Passive Multiagent Systems Under Attack. *Rahnama, A., +, TAC Oct. 2020 4170-4185*
- Model Matching and Passivation of MIMO Linear Systems via Dynamic Output Feedback and Feedforward. Sassano, M., +, TAC Oct. 2020 4016-4030
- Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints. *Zhu, Y*, +, *TAC May 2020 2177-2184*
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*
- Necessary and Sufficient Bit Rate Conditions to Stabilize a Scalar Continuous-Time LTI System Based on Event Triggering. *Ling, Q., TAC April* 2020 1598-1612

- Novel All-Pass Factorization, All Solutions to Rational Matrix Equation and Control Application. *Stefanovski*, *J.*, *TAC July 2020 3176-3183*
- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y.*, +, *TAC Aug. 2020 3714-3721*
- Observers and Disturbance Rejection Control for a Heat Equation. Feng, H., +, TAC Nov. 2020 4957-4964
- On Positive Solutions of a Delay Equation Arising When Trading in Financial Markets. *Hsieh*, C., +, *TAC July 2020 3143-3149*
- On the Event-Triggered Controller Design. Ghodrat, M., +, TAC Oct. 2020 4122-4137
- On the Positive Effect of Delay on the Rate of Convergence of a Class of Linear Time-Delayed Systems. *Moradian, H.,* +, *TAC Nov. 2020 4832-4839*
- On the Stabilization of an Overhead Crane System With Dynamic and Delayed Boundary Conditions. *Chentouf, B., +, TAC Oct. 2020 4273-4280*
- Optimal Event-Triggered Control of Nondeterministic Linear Systems. Maity, D., +, TAC Feb. 2020 604-619
- Optimal Output Regulation for Square, Overactuated and Underactuated Linear Systems. *Bernhard, S.*, +, *TAC Oct. 2020 4416-4423*
- Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. *Wu, G.*, +, *TAC Sept. 2020 3919-3926*
- Orbital Stability Analysis for Perturbed Nonlinear Systems and Natural Entrainment via Adaptive Andronov–Hopf Oscillator. Zhao, J., +, TAC Jan. 2020 87-101
- Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498
- Output Feedback Stabilization for a Class of First-Order Equation Setting of Collocated Well-Posed Linear Systems With Time Delay in Observation. *Guo, B., +, TAC June 2020 2612-2618*
- Performance Improvement via Iterative Connection of Passive Systems. Urata, K., +, TAC March 2020 1325-1332
- Performance Output Tracking for Multidimensional Heat Equation Subject to Unmatched Disturbance and Noncollocated Control. *Zhou, H., +, TAC May 2020 1940-1955*
- Periodic Event-Triggered Control for Nonlinear Networked Control Systems. Wang, W., +, TAC Feb. 2020 620-635
- Preserving and Achieving Passivity-Short Property Through Discretization. Joo, Y., +, TAC Oct. 2020 4265-4272
- Realization of Reachability for the Control of a Class of Nonlinear Systems. Chai, Y, +, TAC March 2020 1073-1088
- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, D., +, *TAC May 2020 2300-2307*
- Removing SPR-Like Conditions in Adaptive Feedforward Control of Uncertain Systems. *Wang, Y.*, +, *TAC June 2020 2309-2324*
- Stability Analysis of Linear Partial Differential Equations With Generalized Energy Functions. Gahlawat, A., +, TAC May 2020 1924-1939
- Stabilization of Highly Nonlinear Hybrid Systems by Feedback Control Based on Discrete-Time State Observations. *Fei, C.*, +, *TAC July 2020* 2899-2912
- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984
- Structured Feedback Synthesis for Stability and Performance of Switched Systems. Chesi, G., +, TAC Nov. 2020 4695-4709
- Tracking Control of Nonlinear Networked and Quantized Control Systems With Communication Delays. *Ren, W.*, +, *TAC Aug. 2020 3685-3692*
- Trajectory Planning Approach to Output Tracking for a 1-D Wave Equation. Feng, H., +, TAC May 2020 1841-1854

Feedforward

- Analysis of Two-Dimensional Feedback Systems Over Networks Using Dissipativity. Yan, Y., +, TAC Aug. 2020 3241-3255
- Feedforward Boundary Control for the Regulation of a Passive and Diffusive Scalar in Two-Dimensional Unsteady Flows. *Liu, W., TAC Nov. 2020* 4882-4886
- Logic-Based Switching Control for Stabilization of Stochastic Feedforward Nonlinear Systems. Yu, M., TAC Oct. 2020 4408-4415

- Model Matching and Passivation of MIMO Linear Systems via Dynamic Output Feedback and Feedforward. Sassano, M., +, TAC Oct. 2020 4016-4030
- Novel All-Pass Factorization, All Solutions to Rational Matrix Equation and Control Application. *Stefanovski*, J., TAC July 2020 3176-3183
- Removing SPR-Like Conditions in Adaptive Feedforward Control of Uncertain Systems. *Wang, Y.*, +, *TAC June 2020 2309-2324*
- Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs. *Deutscher, J., +, TAC May 2020 2207-2214*
- Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes. *Zhang, C.*, +, *TAC May* 2020 2185-2191

Filtering theory

- A Set-Membership Approach to Event-Triggered Filtering for General Nonlinear Systems Over Sensor Networks. *Ding, D.*, +, *TAC April 2020 1792-1799*
- An *H_i*/*H*_∞ Optimization Approach to Event-Triggered Fault Detection for Linear Discrete Time Systems. *Zhong, M.*, +, *TAC Oct. 2020 4464-4471*
- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. *Li*, *F*., +, *TAC May 2020 2163-2170*
- Average Consensus by Graph Filtering: New Approach, Explicit Convergence Rate, and Optimal Design. *Yi*, *J.*, +, *TAC Jan. 2020 191-206*
- Continuous-Time Model Identification From Filtered Sampled Data: Error Analysis. *Hu*, *X*., +, *TAC Oct. 2020 4005-4015*
- Energy-to-Peak Filtering of Semi-Markov Jump Systems With Mismatched Modes. Xu, Z., +, TAC Oct. 2020 4356-4361
- Nonlinear Filtering Method Using a Switching Error Model for Outlier-Contaminated Observations. Nakabayashi, A., +, TAC July 2020 3150-3156
- Optimal Continuous-Discrete Linear Filter and Moment Equations for Nonlinear Diffusions. Cacace, F., +, TAC Oct. 2020 3961-3976
- Proper Orthogonal Decomposition Method to Nonlinear Filtering Problems in Medium-High Dimension. *Wang*, Z., +, *TAC April 2020 1613-1624*
- Quantized Nonstationary Filtering of Networked Markov Switching RSNSs: A Multiple Hierarchical Structure Strategy. *Cheng, J.*, +, *TAC Nov. 2020* 4816-4823
- RBFNN-Based Minimum Entropy Filtering for a Class of Stochastic Nonlinear Systems. Yin, X., +, TAC Jan. 2020 376-381
- Robust Optimal Filtering Over Lossy Networks. Feng, Y., +, TAC May 2020 2272-2277

Finite automata

- Critical Observability for Automata and Petri Nets. Masopust, T., TAC Jan. 2020 341-346
- Structuring Multilevel Discrete-Event Systems With Dependence Structure Matrices. Goorden, M., +, TAC April 2020 1625-1639

Finite state machines

- Auditor Product and Controller Synthesis for Nondeterministic Transition Systems With Practical LTL Specifications. *Zibaeenejad, M.H.*, +, *TAC Oct.* 2020 4281-4287
- Opacity Enforcement for Confidential Robust Control in Linear Cyber-Physical Systems. An, L., +, TAC March 2020 1234-1241
- Transforming Opacity Verification to Nonblocking Verification in Modular Systems. *Mohajerani, S., +, TAC April 2020 1739-1746*

FIR filters

- Convex Searches for Discrete-Time Zames–Falb Multipliers. Carrasco, J., +, TAC Nov. 2020 4538-4553
- Unbiased FIR Filtering for Time-Stamped Discretely Delayed and Missing Data. Uribe-Murcia, K.J., +, TAC May 2020 2155-2162

Floating point arithmetic

A Bounded-Variable Least-Squares Solver Based on Stable QR Updates. Saraf, N., +, TAC March 2020 1242-1247

Flow control

Feedforward Boundary Control for the Regulation of a Passive and Diffusive Scalar in Two-Dimensional Unsteady Flows. *Liu, W., TAC Nov. 2020* 4882-4886

Flow instability

On the Chain Stability of Bilateral Control Model. Wang, L., +, TAC Aug. 2020 3397-3408

Formal specification

Auditor Product and Controller Synthesis for Nondeterministic Transition Systems With Practical LTL Specifications. *Zibaeenejad, M.H.*, +, *TAC Oct. 2020 4281-4287*

Formal verification

- On the Stability of Unverified Transactions in a DAG-Based Distributed Ledger. *Ferraro*, *P*, +, *TAC Sept. 2020 3772-3783*
- Over-Approximation of Fluid Models. Tschaikowski, M., TAC March 2020 999-1013

Fourier analysis

Two-Dimensional Frequency-Domain System Identification. Wang, X., +, TAC Feb. 2020 577-590

Free energy

Stochastic Control and Nonequilibrium Thermodynamics: Fundamental Limits. Chen, Y., +, TAC July 2020 2979-2991

Frequency control

- Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads. *Kim, H., +, TAC Nov. 2020 4887-4894*
- Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. Wu, G., +, TAC Sept. 2020 3919-3926

Frequency synchronization

Synchronization of Kuramoto Oscillators: A Regional Stability Framework. Zhu, L., +, TAC Dec. 2020 5070-5082

Frequency-domain analysis

 A Direct Proof of the Equivalence of Side Conditions for Strictly Positive Real Matrix Transfer Functions. *Ferrante*, A., +, *TAC Jan. 2020 450-452* Reduced-Order H_∞ Filter Design for Delta Operator Systems Over Multiple

Frequency Intervals. Yang, H., +, TAC Dec. 2020 5376-5383

Two-Dimensional Frequency-Domain System Identification. Wang, X., +, TAC Feb. 2020 577-590

Friction

- Global Sliding Mode Observers for Some Uncertain Mechanical Systems. Apaza-Perez, W.A., +, TAC March 2020 1348-1355
- Regulation of Inhomogeneous Drilling Model With a P-I Controller. Terrand-Jeanne, A., +, TAC Jan. 2020 58-71

Function approximation

- A Universal Empirical Dynamic Programming Algorithm for Continuous State MDPs. *Haskell, W.B.*, +, *TAC Jan. 2020 115-129*
- Data-Driven Economic NMPC Using Reinforcement Learning. Gros, S., +, TAC Feb. 2020 636-648
- Gradient Flow Algorithms for Density Propagation in Stochastic Systems. Caluya, K.F., +, TAC Oct. 2020 3991-4004
- Gradient-Based Discrete-Time Concurrent Learning for Standalone Function Approximation. Djaneye-Boundjou, O., +, TAC Feb. 2020 749-756

Information Relaxation Bounds for Partially Observed Markov Decision Processes. *Haugh, M.B.*, +, *TAC Aug. 2020 3256-3271*

Functional analysis

Well-Posedness of Time-Varying Linear Systems. Kurula, M., TAC Oct. 2020 4075-4089

G

Galerkin method

Reduced Order Controller Design for Robust Output Regulation. *Paunonen*, L., +, *TAC June 2020 2480-2493*

Game theory

- A Game-Theoretic Approach for Dynamic Information Flow Tracking to Detect Multistage Advanced Persistent Threats. *Moothedath, S.*, +, *TAC Dec. 2020 5248-5263*
- Auditor Product and Controller Synthesis for Nondeterministic Transition Systems With Practical LTL Specifications. *Zibaeenejad, M.H.*, +, *TAC Oct, 2020 4281-4287*
- Collective Stochastic Discrete Choice Problems: A Min-LQG Dynamic Game Formulation. Salhab, R., +, TAC Aug. 2020 3302-3316
- Competitive Statistical Estimation With Strategic Data Sources. Westenbroek, T., +, TAC April 2020 1537-1551
- Continuous-Time Integral Dynamics for a Class of Aggregative Games With Coupling Constraints. *De Persis*, C., +, *TAC May 2020 2171-2176*

- Distributed GNE Seeking Under Partial-Decision Information Over Networks via a Doubly-Augmented Operator Splitting Approach. *Pavel, L., TAC April 2020 1584-1597*
- Distributed Mechanism Design With Learning Guarantees for Private and Public Goods Problems. Sinha, A., +, TAC Oct. 2020 4106-4121
- Feedback Nash Equilibrium for Randomly Switching Differential–Algebraic Games. Tanwani, A., +, TAC Aug. 2020 3286-3301
- Heterogeneous Hegselmann–Krause Dynamics With Environment and Communication Noise. *Chen, G.*, +, *TAC Aug. 2020 3409-3424*
- Linear Quadratic Mean Field Games: Asymptotic Solvability and Relation to the Fixed Point Approach. *Huang, M., +, TAC April 2020 1397-1412*
- Mean Field Games With Parametrized Followers. Bensoussan, A., +, TAC Jan. 2020 12-27
- On the LQG Game With Nonclassical Information Pattern Using a Direct Solution Method. *Clemens, J.W.*, +, *TAC May 2020 2078-2093*
- Robust Optimal Filtering Over Lossy Networks. Feng, Y., +, TAC May 2020 2272-2277
- Semiexplicit Solutions to Some Nonlinear Nonquadratic Mean-Field-Type Games: A Direct Method. *Barreiro-Gomez, J.*, +, *TAC June 2020 2582-*2597
- Solutions for Multiagent Pursuit-Evasion Games on Communication Graphs: Finite-Time Capture and Asymptotic Behaviors. *Lopez, V.G.*, +, *TAC May 2020 1911-1923*
- Stochastic Control Approach to Reputation Games. *Dalkiran, N.A.*, +, *TAC Nov. 2020 4710-4725*
- Uncertainty in Multicommodity Routing Networks: When Does It Help?. Sekar, S., +, TAC Nov. 2020 4600-4615
- Utility Design for Distributed Resource Allocation—Part I: Characterizing and Optimizing the Exact Price of Anarchy. *Paccagnan, D.*, +, *TAC Nov.* 2020 4616-4631

Games

- A Game-Theoretic Approach for Dynamic Information Flow Tracking to Detect Multistage Advanced Persistent Threats. *Moothedath, S.*, +, *TAC Dec. 2020 5248-5263*
- Corrections to "Stochastic Stability of Perturbed Learning Automata in Positive-Utility Games" [Nov 19 4454-4469]. *Chasparis, G.C., TAC April* 2020 1822
- Finding the Equilibrium for Continuous Constrained Markov Games Under the Average Criteria. *Jiang, X., +, TAC Dec. 2020 5399-5406*

Leader–Follower Network Aggregative Game With Stochastic Agents' Communication and Activeness. *Shokri, M.*, +, *TAC Dec. 2020 5496-5502* Gaussian channels

A Topology for Team Policies and Existence of Optimal Team Policies in

Stochastic Team Theory. Saldi, N., TAC Jan. 2020 310-317

Gaussian distribution

- An Adaptive Gaussian Sum Kalman Filter Based on a Partial Variational Bayesian Method. *Xu*, *H.*, +, *TAC Nov. 2020 4793-4799*
- Nonlinear Filtering Method Using a Switching Error Model for Outlier-Contaminated Observations. Nakabayashi, A., +, TAC July 2020 3150-3156
- Remote State Estimation With Stochastic Event-Triggered Sensor Schedule and Packet Drops. Xu, L., +, TAC Nov. 2020 4981-4988

Gaussian noise

- An Adaptive Gaussian Sum Kalman Filter Based on a Partial Variational Bayesian Method. *Xu*, *H.*, +, *TAC Nov. 2020 4793-4799*
- Identification of Linear Models From Quantized Data: A Midpoint-Projection Approach. *Risuleo, R.S.,* +, *TAC July 2020 2801-2813*
- Near Optimality of Linear Strategies for Static Teams With "Big" Non-Gaussian Noise. Kulkarni, A.A., TAC Feb. 2020 534-545
- Quantum State Filter With Disturbance and Noise. Zhang, J., +, TAC July 2020 2856-2866
- RBFNN-Based Minimum Entropy Filtering for a Class of Stochastic Nonlinear Systems. Yin, X., +, TAC Jan. 2020 376-381
- Well-Posedness of Boundary Controlled and Observed Stochastic Port-Hamiltonian Systems. Lamoline, F., +, TAC Oct. 2020 4258-4264

Gaussian processes

An Event-Based Stealthy Attack on Remote State Estimation. Cheng, P., +, TAC Oct. 2020 4348-4355

- Design of Privacy-Preserving Dynamic Controllers. *Kawano, Y.*, +, *TAC Sept. 2020 3863-3878*
- Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning. Umlauft, J., +, TAC Oct. 2020 4154-4169
- Gaussian Conditionally Markov Sequences: Singular/Nonsingular. *Rezaie*, *R.*, +, *TAC May 2020 2286-2293*
- On the Nonexistence of Event Triggers That Preserve Gaussian State in Presence of Packet-Drop. Kung, E., +, TAC Oct. 2020 4302-4307
- The Time-Invariant Multidimensional Gaussian Sequential Rate-Distortion Problem Revisited. *Stavrou, P.A.*, +, *TAC May 2020 2245-2249*

Genetics

- Adaptation Mechanisms in Phosphorylation Cycles By Allosteric Binding and Gene Autoregulation. Fang, Z., +, TAC Aug. 2020 3457-3470
- On Convergence for Piecewise Affine Models of Gene Regulatory Networks via a Lyapunov Approach. *Pasquini, M.*, +, *TAC Aug. 2020 3333-3348* Genomics
 - Adaptation Mechanisms in Phosphorylation Cycles By Allosteric Binding and Gene Autoregulation. Fang, Z., +, TAC Aug. 2020 3457-3470

Geometric programming

- Geometric Programming for Optimal Positive Linear Systems. Ogura, M., +, TAC Nov. 2020 4648-4663
- Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907

Geometry

- Quantum State Filter With Disturbance and Noise. Zhang, J., +, TAC July 2020 2856-2866
- Riemannian Optimal Identification Method for Linear Systems With Symmetric Positive-Definite Matrix. Sato, K., +, TAC Nov. 2020 4493-4508
- Smooth Interpolation of Covariance Matrices and Brain Network Estimation: Part II. Ning, L., TAC May 2020 1901-1910

Geophysics computing

Nonlinear Filtering Method Using a Switching Error Model for Outlier-Contaminated Observations. *Nakabayashi, A.*, +, *TAC July 2020 3150-3156*

Global Positioning System

Unbiased FIR Filtering for Time-Stamped Discretely Delayed and Missing Data. Uribe-Murcia, K.J., +, TAC May 2020 2155-2162

Gradient methods

- A Distributed Continuous-Time Algorithm for Nonsmooth Constrained Optimization. Chen, G., +, TAC Nov. 2020 4914-4921
- A Smooth Double Proximal Primal-Dual Algorithm for a Class of Distributed Nonsmooth Optimization Problems. *Wei, Y.*, +, *TAC April 2020 1800-1806*
- Accelerated Distributed Nesterov Gradient Descent. Qu, G., +, TAC June 2020 2566-2581
- AsySPA: An Exact Asynchronous Algorithm for Convex Optimization Over Digraphs. Zhang, J., +, TAC June 2020 2494-2509
- Distributed Event-Triggered Gradient Method for Constrained Convex Minimization. Liu, C., +, TAC Feb. 2020 778-785
- Distributed Heavy-Ball: A Generalization and Acceleration of First-Order Methods With Gradient Tracking. Xin, R., +, TAC June 2020 2627-2633
- Distributed Optimal Coordination for Heterogeneous Linear Multiagent Systems With Event-Triggered Mechanisms. *Li*, *Z.*, +, *TAC April 2020* 1763-1770
- Distributed Smooth Convex Optimization With Coupled Constraints. *Liang*, S., +, TAC Jan. 2020 347-353
- Dual Averaging Push for Distributed Convex Optimization Over Time-Varying Directed Graph. Liang, S., +, TAC April 2020 1785-1791
- Finite-Time Guarantees for Byzantine-Resilient Distributed State Estimation With Noisy Measurements. Su, L., +, TAC Sept. 2020 3758-3771
- Gradient Flow Algorithms for Density Propagation in Stochastic Systems. Caluya, K.F., +, TAC Oct. 2020 3991-4004
- Gradient-Based Discrete-Time Concurrent Learning for Standalone Function Approximation. *Djaneye-Boundjou, O.*, +, *TAC Feb. 2020 749-756*
- Interval Error Correction Auxiliary Model Based Gradient Iterative Algorithms for Multirate ARX Models. *Chen, J.*, +, *TAC Oct. 2020 4385-4392*

Online Distributed Optimization With Strongly Pseudoconvex-Sum Cost Functions. Lu, K., +, TAC Jan. 2020 426-433

- Online Stochastic Optimization of Networked Distributed Energy Resources. *Zhou, X., +, TAC June 2020 2387-2401*
- Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498
- Proximal Algorithms for Large-Scale Statistical Modeling and Sensor/Actuator Selection. Zare, A., +, TAC Aug. 2020 3441-3456
- Randomized Gradient-Free Distributed Optimization Methods for a Multiagent System With Unknown Cost Function. *Pang, Y.*, +, *TAC Jan. 2020* 333-340
- Stochastic Control of Multidimensional Systems With Relative Optimization. Cao, X., TAC May 2020 1886-1900
- UD-Based Pairwise and MIMO Kalman-Like Filtering for Estimation of Econometric Model Structures. *Kulikova, M.V.*, +, *TAC Oct. 2020 4472-4479*
- Varying-Parameter Convergent-Differential Neural Solution to Time-Varying Overdetermined System of Linear Equations. *Zhang, Z.*, +, *TAC Feb.* 2020 874-881

Graph coloring

Strong Structural Controllability of Systems on Colored Graphs. Jia, J., +, TAC Oct. 2020 3977-3990

Graph theory

- An Approach to Improve Permissiveness of Supervisors for GMECs in Time Petri Net Systems. *Li*, *L.*, +, *TAC Jan. 2020 237-251*
- Analyzing Controllability of Bilinear Systems on Symmetric Groups: Mapping Lie Brackets to Permutations. *Zhang, W.*, +, *TAC Nov. 2020 4895-4901*
- Asymptotic Behavior of Conjunctive Boolean Networks Over Weakly Connected Digraphs. Chen, X., +, TAC June 2020 2536-2549
- Average Consensus by Graph Filtering: New Approach, Explicit Convergence Rate, and Optimal Design. Yi, J., +, TAC Jan. 2020 191-206
- Causality and Network Graph in General Bilinear State-Space Representations. Jozsa, M., +, TAC Aug. 2020 3623-3630
- Decentralized Optimization Over Time-Varying Directed Graphs With Row and Column-Stochastic Matrices. *Saadatniaki*, F., +, *TAC Nov. 2020 4769-4780*
- Delayed and Switched Control of Formations on a Line Segment: Delays and Switches Do Not Matter. *Aleksandrov, A.*, +, *TAC Feb. 2020 794-800*
- Event-Triggered Bipartite Consensus for Multiagent Systems: A Zeno-Free Analysis. Yu, H., +, TAC Nov. 2020 4866-4873
- Interaction-Based Distributed Learning in Cyber-Physical and Social Networks. Sasso, F., +, TAC Jan. 2020 223-236
- Learning-Based Event-Triggered Control for Synchronization of Passive Multiagent Systems Under Attack. *Rahnama, A., +, TAC Oct. 2020 4170-4185*
- Markov Chains With Maximum Return Time Entropy for Robotic Surveillance. Duan, X., +, TAC Jan. 2020 72-86
- Minimal and Redundant Bearing Rigidity: Conditions and Applications. Trinh, M.H., +, TAC Oct. 2020 4186-4200
- Minimum-Energy Distributed Consensus Control of Multiagent Systems: A Network Approximation Approach. *Chen, F., +, TAC March 2020 1144-1159*
- Necessary and Sufficient Topological Conditions for Identifiability of Dynamical Networks. van Waarde, H.J., +, TAC Nov. 2020 4525-4537
- Ratio-of-Distance Rigidity Theory With Application to Similar Formation Control. *Cao, K.*, +, *TAC June 2020 2598-2611*
- Resilient Distributed Optimization Algorithm Against Adversarial Attacks. *Zhao, C., +, TAC Oct. 2020 4308-4315*
- Resilient Leader-Follower Consensus to Arbitrary Reference Values in Time-Varying Graphs. Usevitch, J., +, TAC April 2020 1755-1762
- Signal Selection for Estimation and Identification in Networks of Dynamic Systems: A Graphical Model Approach. *Materassi, D.*, +, *TAC Oct. 2020* 4138-4153
- Solutions for Multiagent Pursuit-Evasion Games on Communication Graphs: Finite-Time Capture and Asymptotic Behaviors. *Lopez, V.G.*, +, *TAC May 2020 1911-1923*

Synthesizing Communication Plans for Reachability and Safety Specifications. *Hashimoto, K.*, +, *TAC Feb. 2020 561-576*

Graphical models

Learning Latent Variable Dynamic Graphical Models by Confidence Sets Selection. *Ciccone*, *V*., +, *TAC Dec. 2020 5130-5143*

Group theory

On the Stabilization of an Overhead Crane System With Dynamic and Delayed Boundary Conditions. *Chentouf, B.,* +, *TAC Oct. 2020 4273-4280*

H_{∞} control

Event-Triggered H_{∞} Control of Networked Control Systems With Distributed Transmission Delay. *Yan, S.,* +, *TAC Oct. 2020 4295-4301*

Н

Geometric Programming for Optimal Positive Linear Systems. Ogura, M., +, TAC Nov. 2020 4648-4663

Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks. *Peng, C.*, +, *TAC Sept. 2020* 3943-3949

Hessian matrices

A Proof on Equivalence of Stagewise Newton and Dreyfus's Successive Approximation Procedures. *Mizutani, E., TAC June 2020 2716-2723*

Hidden Markov models

Model Reduction of Markovian Jump Systems With Uncertain Probabilities. Shen, Y., +, TAC Jan. 2020 382-388

Passivity-Based Control for Hidden Markov Jump Systems With Singular Perturbations and Partially Unknown Probabilities. *Li*, *F*, +, *TAC Aug.* 2020 3701-3706

Hierarchical systems

A Distributed Cyber-Attack Detection Scheme With Application to DC Microgrids. *Gallo, A.J.*, +, *TAC Sept. 2020 3800-3815*

Minimum Cost Feedback Selection in Structured Systems: Hardness and Approximation Algorithm. *Joshi, A.*, +, *TAC Dec. 2020 5517-5524*

Quantized Nonstationary Filtering of Networked Markov Switching RSNSs: A Multiple Hierarchical Structure Strategy. *Cheng, J.*, +, *TAC Nov. 2020* 4816-4823

Hilbert spaces

- A Universal Empirical Dynamic Programming Algorithm for Continuous State MDPs. *Haskell, W.B.*, +, *TAC Jan. 2020 115-129*
- Approximate Controllability and Approximate Observability of Singular Distributed Parameter Systems. *Ge*, *Z*., +, *TAC May 2020 2294-2299*
- Well-Posedness of Boundary Controlled and Observed Stochastic Port-Hamiltonian Systems. Lamoline, F., +, TAC Oct. 2020 4258-4264

Hyperbolic equations

Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*

Stability Analysis for a Class of Linear 2 \times 2 Hyperbolic PDEs Using a Backstepping Transform. *Bou Saba, D.*, +, *TAC July 2020 2941-2956*

Hysteresis

Integral Control of Stable Negative-Imaginary Systems Preceded by Hysteresis Nonlinearity. *Dey*, *A.*, +, *TAC March 2020 1333-1339*

T

Identification

Continuous-Time Model Identification From Filtered Sampled Data: Error Analysis. *Hu*, *X*, +, *TAC Oct. 2020 4005-4015*

Extending the Best Linear Approximation Framework to the Process Noise Case. Schoukens, M., +, TAC April 2020 1514-1524

- Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning. Umlauft, J., +, TAC Oct. 2020 4154-4169
- Identification Using Binary Measurements for IIR Systems. *Pouliquen, M.*, +, *TAC Feb. 2020 786-793*
- Koopman-Based Lifting Techniques for Nonlinear Systems Identification. Mauroy, A., +, TAC June 2020 2550-2565

On Local LTI Model Coherence for LPV Interpolation. Zhang, Q., +, TAC Aug. 2020 3671-3676

- Signal Selection for Estimation and Identification in Networks of Dynamic Systems: A Graphical Model Approach. *Materassi, D.*, +, *TAC Oct. 2020* 4138-4153
- Two-Dimensional Frequency-Domain System Identification. Wang, X., +, TAC Feb. 2020 577-590

IIR filters

Convex Searches for Discrete-Time Zames–Falb Multipliers. *Carrasco, J.*, +, *TAC Nov. 2020 4538-4553*

Identification Using Binary Measurements for IIR Systems. *Pouliquen, M.*, +, *TAC Feb. 2020 786-793*

Impedance

Minimal Series–Parallel Network Realizations of Bicubic Impedances. Hughes, T.H., TAC Dec. 2020 4997-5011

Inductors

Minimal Series–Parallel Network Realizations of Bicubic Impedances. Hughes, T.H., TAC Dec. 2020 4997-5011

Industrial control

Regulation of Inhomogeneous Drilling Model With a P-I Controller. Terrand-Jeanne, A., +, TAC Jan. 2020 58-71

Inertial navigation

Hybrid Nonlinear Observers for Inertial Navigation Using Landmark Measurements. Wang, M., +, TAC Dec. 2020 5173-5188

Infinite horizon

- A Nonlinear Model Predictive Control Framework Using Reference Generic Terminal Ingredients. *Kohler, J.*, +, *TAC Aug. 2020 3576-3583*
- Optimal Event-Triggered Control of Nondeterministic Linear Systems. Maity, D., +, TAC Feb. 2020 604-619
- Renewal Monte Carlo: Renewal Theory-Based Reinforcement Learning. Subramanian, J., +, TAC Aug. 2020 3663-3670

Information theory

A Generalized Framework For Kullback–Leibler Markov Aggregation. Amjad, R.A., +, TAC July 2020 3068-3075

Integer programming

Abstraction-Based Safety Verification and Control of Cooperative Vehicles at Road Intersections. Ahn, H., +, TAC Oct. 2020 4061-4074

- Distributed Mixed-Integer Linear Programming via Cut Generation and Constraint Exchange. *Testa, A., +, TAC April 2020 1456-1467*
- Optimizing Attack Schedules Based on Energy Dispatch Over Two-Hop Relay Networks. *Gan, R.,* +, *TAC Sept. 2020 3832-3846*

Integral equations

A Simplified Approach to Analyze Complementary Sensitivity Tradeoffs in Continuous-Time and Discrete-Time Systems. *Wan, N., +, TAC April 2020 1697-1703*

Integration

Variational Integrators for Dissipative Systems. Limebeer, D.J.N., +, TAC April 2020 1381-1396

Integro-differential equations

Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs. *Deutscher, J.*, +, *TAC May 2020 2207-2214*

Interconnected systems

- A Complete Characterization of Integral Input-to-State Stability and Its Small-Gain Theorem for Stochastic Systems. *Ito, H., TAC July 2020 3039-3052*
- Compositional (In)Finite Abstractions for Large-Scale Interconnected Stochastic Systems. *Lavaei*, A., +, TAC Dec. 2020 5280-5295
- Detection of Covert Cyber-Attacks in Interconnected Systems: A Distributed Model-Based Approach. *Barboni, A.*, +, *TAC Sept. 2020 3728-3741*
- Necessary and Sufficient Conditions on Negative Imaginariness for Interval SISO Transfer Functions and Their Interconnection. *Liu*, *M.*, +, *TAC Oct.* 2020 4362-4368
- On Structured Lyapunov Functions and Dissipativity in Interconnected LTI Systems. *Jokic, A., +, TAC March 2020 970-985*

Internet of Things

Finding the Equilibrium for Continuous Constrained Markov Games Under the Average Criteria. *Jiang, X., +, TAC Dec. 2020 5399-5406*

Interpolation

*H*₂ Model Reduction of Linear Network Systems by Moment Matching and Optimization. *Necoara, I.*, +, *TAC Dec. 2020 5328-5335*

- Codesign of Event Trigger and Feedback Policy in Robust Model Predictive Control. *Liu*, *C.*, +, *TAC Jan. 2020 302-309*
- On Local LTI Model Coherence for LPV Interpolation. Zhang, Q., +, TAC Aug. 2020 3671-3676
- Quasi-Polynomial-Based Robust Stability of Time-Delay Systems Can be Less Conservative Than Lyapunov–Krasovskii Approaches. Angulo, S., +, TAC July 2020 3164-3169
- Smooth Interpolation of Covariance Matrices and Brain Network Estimation: Part II. Ning, L., TAC May 2020 1901-1910

Invariance

- A Distributed Continuous-Time Algorithm for Nonsmooth Constrained Optimization. Chen, G., +, TAC Nov. 2020 4914-4921
- Secure and Private Implementation of Dynamic Controllers Using Semihomomorphic Encryption. *Murguia, C., +, TAC Sept. 2020 3950-3957*
- Spacecraft Attitude Control With Nonconvex Constraints: An Explicit Reference Governor Approach. Nicotra, M.M., +, TAC Aug. 2020 3677-3684 Inverse problems
- Inverse problems
 - On the Well-Posedness of a Parametric Spectral Estimation Problem and Its Numerical Solution. *Zhu, B., TAC March 2020 1089-1099*

Investment

Equilibrium Solutions of Multiperiod Mean-Variance Portfolio Selection. Ni, Y, +, TAC April 2020 1716-1723

Iterative methods

- A Bounded-Variable Least-Squares Solver Based on Stable QR Updates. Saraf, N., +, TAC March 2020 1242-1247
- A Fast Distributed Asynchronous Newton-Based Optimization Algorithm. Mansoori, F., +, TAC July 2020 2769-2784
- A Universal Empirical Dynamic Programming Algorithm for Continuous State MDPs. *Haskell, W.B.*, +, *TAC Jan. 2020 115-129*
- An Iterative Learning Control Algorithm With Gain Adaptation for Stochastic Systems. Shen, D., +, TAC March 2020 1280-1287
- Analysis of Stochastic Approximation Schemes With Set-Valued Maps in the Absence of a Stability Guarantee and Their Stabilization. *Yaji, V.G.*, +, *TAC March 2020 1100-1115*
- Computing Optimal Control of Cascading Failure in DC Networks. *Ba*, *Q*., +, *TAC June 2020 2402-2417*
- Decentralized Optimization Over Time-Varying Directed Graphs With Row and Column-Stochastic Matrices. *Saadatniaki*, F., +, *TAC Nov. 2020 4769-4780*
- Distributed Stochastic Approximation Algorithm With Expanding Truncations. Lei, J., +, TAC Feb. 2020 664-679
- Dynamic Sharing Through the ADMM. Cao, X., +, TAC May 2020 2215-2222
- Explicit Iterative Algorithms for Continuous Coupled Lyapunov Matrix Equations. *Sun, H.*, +, *TAC Aug. 2020 3631-3638*
- Interval Error Correction Auxiliary Model Based Gradient Iterative Algorithms for Multirate ARX Models. *Chen, J.*, +, *TAC Oct. 2020 4385-4392*
- Optimal Secure Control With Linear Temporal Logic Constraints. Niu, L., +, TAC June 2020 2434-2449
- Performance Guarantees for Model-Based Approximate Dynamic Programming in Continuous Spaces. *Beuchat, P.N.*, +, *TAC Jan. 2020 143-158*
- Performance Improvement via Iterative Connection of Passive Systems. Urata, K., +, TAC March 2020 1325-1332
- Privacy-Preserving Distributed Averaging via Homomorphically Encrypted Ratio Consensus. *Hadjicostis, C.N.*, +, *TAC Sept. 2020 3887-3894*
- Quantum State Filter With Disturbance and Noise. Zhang, J., +, TAC July 2020 2856-2866
- Risk Probability Minimization Problems for Continuous-Time Markov Decision Processes on Finite Horizon. *Huo, H.*, +, *TAC July 2020 3199-3206*
- Self-Learning Optimal Regulation for Discrete-Time Nonlinear Systems Under Event-Driven Formulation. *Wang, D.*, +, *TAC March 2020 1272-1279*
- SI-ADMM: A Stochastic Inexact ADMM Framework for Stochastic Convex Programs. Xie, Y., +, TAC June 2020 2355-2370
- Two-Dimensional Frequency-Domain System Identification. Wang, X., +, TAC Feb. 2020 577-590

J

Jacobian matrices

Stabilization of Nonlinear Dynamic Systems Over Limited Capacity Communication Channels. *Sanjaroon, V.*, +, *TAC Aug. 2020 3655-3662*

Jamming

Optimizing Attack Schedules Based on Energy Dispatch Over Two-Hop Relay Networks. *Gan, R., +, TAC Sept. 2020 3832-3846*

K

- Kalman filters
 - An Adaptive Gaussian Sum Kalman Filter Based on a Partial Variational Bayesian Method. *Xu*, *H.*, +, *TAC Nov. 2020 4793-4799*
 - Chandrasekhar-Based Maximum Correntropy Kalman Filtering With the Adaptive Kernel Size Selection. *Kulikova, M.V., TAC Feb. 2020* 741-748
 - Distributed Kalman Filters With State Equality Constraints: Time-Based and Event-Triggered Communications. *He, X.*, +, *TAC Jan. 2020 28-43*
 - Event-Triggered Discrete-Time Cubature Kalman Filter for Nonlinear Dynamical Systems With Packet Dropout. *Kooshkbaghi, M.*, +, *TAC May* 2020 2278-2285
 - Extended Kalman Filtering With Nonlinear Equality Constraints: A Geometric Approach. *Barrau, A.,* +, *TAC June 2020 2325-2338*
 - MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels. *Cai, S.*, +, *TAC May 2020 2046-2061*
 - Nonlinear Filtering Method Using a Switching Error Model for Outlier-Contaminated Observations. Nakabayashi, A., +, TAC July 2020 3150-3156
 - On Boundedness of Error Covariances for Kalman Consensus Filtering Problems. Li, W., +, TAC June 2020 2654-2661
 - On the Nonexistence of Event Triggers That Preserve Gaussian State in Presence of Packet-Drop. *Kung, E., +, TAC Oct. 2020 4302-4307*
 - On the Stability Bounds of Kalman Filters for Linear Deterministic Discrete-Time Systems. *Haring, M.*, +, *TAC Oct. 2020 4434-4439*
 - Protocol-Based Unscented Kalman Filtering in the Presence of Stochastic Uncertainties. *Liu, S.,* +, *TAC March 2020 1303-1309*
 - Quaternion-Valued Distributed Filtering and Control. Talebi, S.P., +, TAC Oct. 2020 4246-4257
 - Remote State Estimation With Stochastic Event-Triggered Sensor Schedule and Packet Drops. Xu, L., +, TAC Nov. 2020 4981-4988
 - Stealthy Actuator Signal Attacks in Stochastic Control Systems: Performance and Limitations. Fang, C., +, TAC Sept. 2020 3927-3934
 - UD-Based Pairwise and MIMO Kalman-Like Filtering for Estimation of Econometric Model Structures. *Kulikova, M.V.*, +, *TAC Oct. 2020 4472-4479*

Kernel

Stability Analysis of Discrete-Time Semi-Markov Jump Linear Systems. Wang, B., +, TAC Dec. 2020 5415-5421

Kinetic theory

- Asymptotic Behavior and Collision Avoidance in the Cucker–Smale Model. *Yin, X.*, +, *TAC July 2020 3112-3119*
- Efficient Verification of Observability and Reconstructibility for Large Boolean Control Networks With Special Structures. *Zhang, K.*, +, *TAC Dec. 2020 5144-5158*

Korteweg-de Vries equation

Stability Analysis of Dissipative Systems Subject to Nonlinear Damping via Lyapunov Techniques. Marx, S., +, TAC May 2020 2139-2146

L

Laplace equations

Distributed Optimal Coordination for Heterogeneous Linear Multiagent Systems With Event-Triggered Mechanisms. *Li*, *Z*., +, *TAC April 2020* 1763-1770

Large-scale systems

A Distributed Cyber-Attack Detection Scheme With Application to DC Microgrids. Gallo, A.J., +, TAC Sept. 2020 3800-3815

- A Distributed Framework fork-hop Control Strategies in Large-Scale Networks Based on Local Interactions. *Gasparri, A.*, +, *TAC May 2020 1825-1840*
- Data-Driven Economic NMPC Using Reinforcement Learning. Gros, S., +, TAC Feb. 2020 636-648
- Finite-Time Guarantees for Byzantine-Resilient Distributed State Estimation With Noisy Measurements. Su, L., +, TAC Sept. 2020 3758-3771
- Proximal Algorithms for Large-Scale Statistical Modeling and Sensor/Actuator Selection. Zare, A., +, TAC Aug. 2020 3441-3456
- Reachability Analysis of Large Linear Systems With Uncertain Inputs in the Krylov Subspace. *Althoff, M., TAC Feb. 2020* 477-492
- Structuring Multilevel Discrete-Event Systems With Dependence Structure Matrices. Goorden, M., +, TAC April 2020 1625-1639

Learning (artificial intelligence)

- A Proximal Diffusion Strategy for Multiagent Optimization With Sparse Affine Constraints. *Alghunaim, S.A.*, +, *TAC Nov. 2020 4554-4567*
- A Universal Empirical Dynamic Programming Algorithm for Continuous State MDPs. *Haskell, W.B.*, +, *TAC Jan. 2020 115-129*
- Blind Learning of Tree Network Topologies in the Presence of Hidden Nodes. Sepehr, F, +, TAC March 2020 1014-1028
- Control-Oriented Learning on the Fly. Ornik, M., +, TAC Nov. 2020 4800-4807
- Data-Driven Economic NMPC Using Reinforcement Learning. Gros, S., +, TAC Feb. 2020 636-648
- Deep Teams: Decentralized Decision Making With Finite and Infinite Number of Agents. *Arabneydi*, J., +, *TAC Oct. 2020 4230-4245*
- Distributed Mechanism Design With Learning Guarantees for Private and Public Goods Problems. *Sinha, A., +, TAC Oct. 2020 4106-4121*
- Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning. Umlauft, J., +, TAC Oct. 2020 4154-4169
- Finite-Time Guarantees for Byzantine-Resilient Distributed State Estimation With Noisy Measurements. Su, L., +, TAC Sept. 2020 3758-3771

Gradient-Based Discrete-Time Concurrent Learning for Standalone Function Approximation. Djaneye-Boundjou, O., +, TAC Feb. 2020 749-756

- Interaction-Based Distributed Learning in Cyber-Physical and Social Networks. Sasso, F., +, TAC Jan. 2020 223-236
- Inverse Risk-Sensitive Reinforcement Learning. Ratliff, L.J., +, TAC March 2020 1256-1263
- Posterior Sampling-Based Reinforcement Learning for Control of Unknown Linear Systems. *Ouyang, Y., +, TAC Aug. 2020 3600-3607*
- Renewal Monte Carlo: Renewal Theory-Based Reinforcement Learning. Subramanian, J., +, TAC Aug. 2020 3663-3670
- Self-Learning Optimal Regulation for Discrete-Time Nonlinear Systems Under Event-Driven Formulation. *Wang, D.*, +, *TAC March 2020 1272-1279*
- Signal Selection for Estimation and Identification in Networks of Dynamic Systems: A Graphical Model Approach. *Materassi, D.*, +, *TAC Oct. 2020* 4138-4153
- Utility Design for Distributed Resource Allocation—Part I: Characterizing and Optimizing the Exact Price of Anarchy. *Paccagnan, D.*, +, *TAC Nov.* 2020 4616-4631

Learning automata

Corrections to "Stochastic Stability of Perturbed Learning Automata in Positive-Utility Games" [Nov 19 4454-4469]. *Chasparis, G.C., TAC April* 2020 1822

Learning systems

- An Iterative Learning Control Algorithm With Gain Adaptation for Stochastic Systems. *Shen, D.*, +, *TAC March 2020 1280-1287*
- Distributed Coupled Multiagent Stochastic Optimization. Alghunaim, S.A., +, TAC Jan. 2020 175-190
- Leaderless Synchronization of Heterogeneous Oscillators by Adaptively Learning the Group Model. *Baldi, S.*, +, *TAC Jan. 2020 412-418*
- Learning-Based Event-Triggered Control for Synchronization of Passive Multiagent Systems Under Attack. Rahnama, A., +, TAC Oct. 2020 4170-4185

Least mean squares methods

- An Optimal Data Fusion Algorithm in the Presence of Unknown Cross Covariances. Zhang, X., TAC March 2020 1226-1233
- State-Secrecy Codes for Networked Linear Systems. Tsiamis, A., +, TAC May 2020 2001-2015
- State-Space Realizations and Optimal Smoothing for Gaussian Generalized Reciprocal Processes. *White, L.B., +, TAC Jan. 2020 389-396*

Least squares approximations

- A Bounded-Variable Least-Squares Solver Based on Stable QR Updates. Saraf, N., +, TAC March 2020 1242-1247
- Continuous-Time Model Identification From Filtered Sampled Data: Error Analysis. *Hu*, *X*., +, *TAC Oct. 2020 4005-4015*
- Gradient-Based Discrete-Time Concurrent Learning for Standalone Function Approximation. Djaneye-Boundjou, O., +, TAC Feb. 2020 749-756
- Riemannian Optimal Identification Method for Linear Systems With Symmetric Positive-Definite Matrix. Sato, K., +, TAC Nov. 2020 4493-4508
- Varying-Parameter Convergent-Differential Neural Solution to Time-Varying Overdetermined System of Linear Equations. *Zhang, Z.*, +, *TAC Feb.* 2020 874-881

Legged locomotion

On the Existence and Uniqueness of Poincaré Maps for Systems With Impulse Effects. *Goodman, J.R.*, +, *TAC April 2020 1815-1821*

Lie algebras

- Analyzing Controllability of Bilinear Systems on Symmetric Groups: Mapping Lie Brackets to Permutations. *Zhang, W.*, +, *TAC Nov. 2020 4895-4901*
- Contraction Analysis of Monotone Systems via Separable Functions. Kawano, Y., +, TAC Aug. 2020 3486-3501

Lie groups

- Extended Kalman Filtering With Nonlinear Equality Constraints: A Geometric Approach. *Barrau, A.*, +, *TAC June 2020 2325-2338*
- Model Predictive Tracking Control for Invariant Systems on Matrix Lie Groups via Stable Embedding Into Euclidean Spaces. *Chang, D.E.,* +, *TAC* July 2020 3191-3198
- Symmetry Reduction in Optimal Control of Multiagent Systems on Lie Groups. Colombo, L.J., +, TAC Nov. 2020 4973-4980

Limit cycles

On the Existence and Uniqueness of Poincaré Maps for Systems With Impulse Effects. Goodman, J.R., +, TAC April 2020 1815-1821

Linear algebra

 Combining Linear Algebra and Numerical Optimization for Gray-Box Affine State-Space Model Identification. *Prot. O.*, +, *TAC Aug. 2020 3272-3285* Marking Estimation in a Class of Time Labeled Petri Nets. *Ma*, *Z.*, +, *TAC Feb. 2020 493-506*

Linear codes

State-Secrecy Codes for Networked Linear Systems. Tsiamis, A., +, TAC May 2020 2001-2015

Linear differential equations

- Analysis and Computation of the H₂ Norm of Delay Differential Algebraic Equations. *Gomez, M.A.*, +, *TAC May 2020 2192-2199*
- Backstepping Control of Coupled Linear Parabolic PDEs With Space and Time Dependent Coefficients. *Kerschbaum, S.*, +, *TAC July 2020 3060-3067*
- Fredholm Backstepping Control of Coupled Linear Parabolic PDEs With Input and Output Delays. *Deutscher*, J., +, *TAC July 2020 3128-3135*
- Nonanticipating Lyapunov Functions for Persistently Excited Nonlinear Systems. Verrelli, C.M., +, TAC June 2020 2634-2639
- Stability Analysis for a Class of Linear 2 × 2 Hyperbolic PDEs Using a Backstepping Transform. *Bou Saba*, *D.*, +, *TAC July 2020 2941-2956*

Linear matrix inequalities

- A Detector-Based Approach for the Constrained Quadratic Control of Discrete-Time Markovian Jump Linear Systems. Zabala, Y.A., +, TAC March 2020 1211-1217
- A Stabilization Framework for the Output Regulation of Rational Nonlinear Systems. Castro, R.d.S., +, TAC Nov. 2020 4860-4865

- A Switching Controller for a Class of MIMO Bilinear Systems With Time Delay. *Sanchez, T., +, TAC May 2020 2250-2256*
- An Input–Output Approach to Structured Stochastic Uncertainty. *Bamieh*, B., +, *TAC Dec. 2020 5012-5027*
- An LMI Approach to Stability Analysis of Coupled Parabolic Systems. Wakaiki, M., TAC Jan. 2020 404-411
- Analysis and Design of Continuous-Time Multivariable Periodic Controllers: An \mathcal{H}_{∞} /LTR-Based Approach. *Deshmukh, A.*, +, *TAC Aug. 2020 3608-3615*
- Analysis of Systems With Slope Restricted Nonlinearities Using Externally Positive Zames–Falb Multipliers. *Turner, M.C.*, +, *TAC April 2020 1660-1667*
- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
- Convex Searches for Discrete-Time Zames–Falb Multipliers. Carrasco, J., +, TAC Nov. 2020 4538-4553
- Distributed Consensus Over Markovian Packet Loss Channels. Xu, L., +, TAC Jan. 2020 279-286
- Energy-to-Peak Filtering of Semi-Markov Jump Systems With Mismatched Modes. Xu, Z., +, TAC Oct. 2020 4356-4361
- Event-Triggered H_∞ Control of Networked Control Systems With Distributed Transmission Delay. *Yan, S.*, +, *TAC Oct. 2020 4295-4301*
- Fixed-Time Leader-Following Consensus for High-Order Time-Varying Nonlinear Multiagent Systems. You, X., +, TAC Dec. 2020 5510-5516
- Formulas for Data-Driven Control: Stabilization, Optimality, and Robustness. *De Persis, C.*, +, *TAC March 2020 909-924*
- Global Stabilization of Uncertain Lotka–Volterra Systems via Positive Nonlinear State Feedback. *Badri, V.*, +, *TAC Dec. 2020 5450-5455*
- Integral Input-to-State Stability of Networked Control Systems. *Noroozi, N.*, +, *TAC March 2020 1203-1210*
- Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints. *Zhu, Y*, +, *TAC May 2020 2177-2184*
- Novel All-Pass Factorization, All Solutions to Rational Matrix Equation and Control Application. *Stefanovski, J., TAC July 2020 3176-3183*
- Observer Design For a Class of Parabolic Systems With Large Delays and Sampled Measurements. *Ahmed-Ali*, *T.*, +, *TAC May 2020 2200-2206*
- Observer-Based Robust Controller Design With Simultaneous Optimization of Scaling Matrices. *Sato, M., TAC Feb. 2020 861-866*
- On Algebraic Proofs of Stability for Homogeneous Vector Fields. *Ahmadi, A.A.*, +, *TAC Jan. 2020 325-332*
- On Boundedness of Error Covariances for Kalman Consensus Filtering Problems. Li, W., +, TAC June 2020 2654-2661
- On Convergence for Piecewise Affine Models of Gene Regulatory Networks via a Lyapunov Approach. *Pasquini, M.*, +, *TAC Aug. 2020 3333-3348*

On the Existence of Block-Diagonal Solutions to Lyapunov and \mathcal{H}_{∞} Riccati Inequalities. *Sootla, A.*, +, *TAC July 2020 3170-3175*

Periodic Event-Triggered Control for Nonlinear Networked Control Systems. Wang, W., +, TAC Feb. 2020 620-635

Reduced-Order H_{∞} Filter Design for Delta Operator Systems Over Multiple Frequency Intervals. *Yang*, *H.*, +, *TAC Dec. 2020 5376-5383*

Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, D., +, *TAC May 2020 2300-2307*

- Robust Feedback Stabilization of Linear MIMO Systems Using Generalized Homogenization. Zimenko, K., +, TAC Dec. 2020 5429-5436
- Stability Analysis of Linear Coupled Differential-Difference Systems With General Distributed Delays. *Feng, Q., +, TAC March 2020 1356-1363*
- Stability and Stabilization Through Envelopes for Retarded and Neutral Time-Delay Systems. Cardeliquio, C.B., +, TAC April 2020 1640-1646

State Observers for Systems Subject to Bounded Disturbances Using Quadratic Boundedness. *Alessandri, A.*, +, *TAC Dec. 2020 5352-5359*

Static Sliding Mode Control of Systems With Arbitrary Relative Degree by Using Artificial Delay. Xu, J., +, TAC Dec. 2020 5464-5471

Structured Feedback Synthesis for Stability and Performance of Switched Systems. Chesi, G., +, TAC Nov. 2020 4695-4709

Linear programming

- A Decentralized Event-Based Approach for Robust Model Predictive Control. *Kolarijani, A.S.*, +, *TAC Aug. 2020 3517-3529*
- Distributed Mixed-Integer Linear Programming via Cut Generation and Constraint Exchange. *Testa, A., +, TAC April 2020 1456-1467*
- Efficient Strategy Computation in Zero-Sum Asymmetric Information Repeated Games. Li, L., +, TAC July 2020 2785-2800
- On the Existence of Block-Diagonal Solutions to Lyapunov and \mathcal{H}_{∞} Riccati Inequalities. *Sootla*, A., +, *TAC July 2020 3170-3175*
- Optimal Control of Polynomial Hybrid Systems via Convex Relaxations. Zhao, P., +, TAC May 2020 2062-2077
- Performance Guarantees for Model-Based Approximate Dynamic Programming in Continuous Spaces. Beuchat, P.N., +, TAC Jan. 2020 143-158
- Utility Design for Distributed Resource Allocation—Part I: Characterizing and Optimizing the Exact Price of Anarchy. *Paccagnan, D.*, +, *TAC Nov.* 2020 4616-4631

Linear quadratic control

- A Suboptimality Approach to Distributed Linear Quadratic Optimal Control. *Jiao, J.*, +, *TAC March 2020 1218-1225*
- Adaptive Control for a Class of Multi-Input Multi-Output Plants With Arbitrary Relative Degree. Qu, Z., +, TAC July 2020 3023-3038
- An Integrative Perspective to LQ and ℓ_∞ Control for Delayed and Quantized Systems. *Nakahira, Y*, +, *TAC Nov. 2020 4781-4792*
- Analysis and Design of Continuous-Time Multivariable Periodic Controllers: An \mathcal{H}_{∞} /LTR-Based Approach. *Deshmukh, A.*, +, *TAC Aug. 2020* 3608-3615
- Equilibrium Solutions of Multiperiod Mean-Variance Portfolio Selection. *Ni*, *Y*, +, *TAC April 2020 1716-1723*
- Formulas for Data-Driven Control: Stabilization, Optimality, and Robustness. De Persis, C., +, TAC March 2020 909-924
- Graphon Control of Large-Scale Networks of Linear Systems. Gao, S., +, TAC Oct. 2020 4090-4105
- Linear Quadratic Mean Field Games: Asymptotic Solvability and Relation to the Fixed Point Approach. *Huang, M., +, TAC April 2020 1397-1412*
- Mean Field Games With Parametrized Followers. *Bensoussan, A.*, +, *TAC Jan. 2020 12-27*
- On the Existence of the Stabilizing Solution of a Class of Periodic Stochastic Riccati Equations. *Aberkane, S.*, +, *TAC March 2020 1288-1294*
- Optimal Output Regulation for Square, Overactuated and Underactuated Linear Systems. *Bernhard, S.*, +, *TAC Oct. 2020 4416-4423*
- Posterior Sampling-Based Reinforcement Learning for Control of Unknown Linear Systems. *Ouyang, Y., +, TAC Aug. 2020 3600-3607*
- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984

Linear quadratic Gaussian control

- Hankel Singular Values and LQG Characteristic Values of Discrete-Time Linear Systems in Cascade With Inner Systems. *Bucolo, M.*, +, *TAC Nov.* 2020 4989-4994
- Near Optimality of Linear Strategies for Static Teams With "Big" Non-Gaussian Noise. Kulkarni, A.A., TAC Feb. 2020 534-545
- On the LQG Game With Nonclassical Information Pattern Using a Direct Solution Method. *Clemens, J.W.*, +, *TAC May 2020 2078-2093*

Linear systems

- "Class-Type" Identification-Based Internal Models in Multivariable Nonlinear Output Regulation. *Bin, M.*, +, *TAC Oct. 2020 4369-4376*
- A Decentralized Event-Based Approach for Robust Model Predictive Control. Kolarijani, A.S., +, TAC Aug. 2020 3517-3529
- A Detector-Based Approach for the Constrained Quadratic Control of Discrete-Time Markovian Jump Linear Systems. Zabala, Y.A., +, TAC March 2020 1211-1217
- A Note on Uniform Exponential Stability of Linear Periodic Time-Varying Systems. Vrabel, R., TAC April 2020 1647-1651
- A Novel Method to Compute the Structured Distance to Instability for Combined Uncertainties on Delays and System Matrices. *Borgioli, F.*, +, *TAC April 2020 1747-1754*
- A Test for the Generic Strong Accessibility of Meromorphic Nonlinear Systems. Carravetta, F., +, TAC Feb. 2020 867-873

- An H_i/H_∞ Optimization Approach to Event-Triggered Fault Detection for Linear Discrete Time Systems. Zhong, M., +, TAC Oct. 2020 4464-4471
- An Adaptive Gaussian Sum Kalman Filter Based on a Partial Variational Bayesian Method. *Xu*, *H.*, +, *TAC Nov. 2020 4793-4799*
- An Input–Output Approach to Structured Stochastic Uncertainty. *Bamieh*, *B.*, +, *TAC Dec. 2020 5012-5027*
- An Integrative Perspective to LQ and ℓ_{∞} Control for Delayed and Quantized Systems. *Nakahira, Y*, +, *TAC Nov. 2020 4781-4792*
- Analysis and Design of Continuous-Time Multivariable Periodic Controllers: An \mathcal{H}_{∞} /LTR-Based Approach. *Deshmukh, A.*, +, *TAC Aug. 2020 3608-3615*
- Analysis of Systems With Slope Restricted Nonlinearities Using Externally Positive Zames–Falb Multipliers. *Turner, M.C.*, +, *TAC April 2020 1660-1667*
- Analysis of Two-Dimensional Feedback Systems Over Networks Using Dissipativity. Yan, Y., +, TAC Aug. 2020 3241-3255
- Analyzing Controllability of Bilinear Systems on Symmetric Groups: Mapping Lie Brackets to Permutations. Zhang, W., +, TAC Nov. 2020 4895-4901
- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
- Cascading With Inner Systems: Hankel Singular Values and Characteristic Values. *Buscarino, A.,* +, *TAC Feb. 2020 727-732*
- Codesign of Event Trigger and Feedback Policy in Robust Model Predictive Control. Liu, C., +, TAC Jan. 2020 302-309
- Combining Linear Algebra and Numerical Optimization for Gray-Box Affine State-Space Model Identification. Prot, O., +, TAC Aug. 2020 3272-3285
- Completely Decentralized Design of Distributed Observer for Linear Systems. *Kim, T.*, +, *TAC Nov. 2020 4664-4678*
- Consensus of Linear Multiagent Systems With Distributed Infinite Transmission Delays: A Low Gain Approach. Xu, X., +, TAC Feb. 2020 809-816
- Constrained Adaptive Model-Predictive Control for a Class of Discrete-Time Linear Systems With Parametric Uncertainties. *Zhu, B., +, TAC May 2020* 2223-2229
- Continuous Discrete Sequential Observers for Time-Varying Systems Under Sampling and Input Delays. Mazenc, F., +, TAC April 2020 1704-1709
- Contraction Analysis of Monotone Systems via Separable Functions. Kawano, Y., +, TAC Aug. 2020 3486-3501
- Control of Continuous-Time Linear Systems With Markov Jump Parameters in Reverse Time. Narvaez, A.R.R., +, TAC May 2020 2265-2271
- Corrections to "Model Predictive Control for Stochastic Max-Plus Linear Systems With Chance Constraints,". *Boom, T.J.J.v.d.*, +, *TAC Feb. 2020* 905-906
- Critical Observability for Automata and Petri Nets. Masopust, T., TAC Jan. 2020 341-346
- Data Informativity: A New Perspective on Data-Driven Analysis and Control. van Waarde, H.J., +, TAC Nov. 2020 4753-4768
- Design Procedure for Linear Unknown Input Functional Observers. Sakhraoui, I., +, TAC Feb. 2020 831-838
- Distributed Consensus Over Markovian Packet Loss Channels. Xu, L., +, TAC Jan. 2020 279-286
- Distributed Model Predictive Control for Linear Systems With Adaptive Terminal Sets. Darivianakis, G., +, TAC March 2020 1044-1056
- Distributed Optimal Coordination for Heterogeneous Linear Multiagent Systems With Event-Triggered Mechanisms. *Li, Z.*, +, *TAC April 2020 1763-1770*
- Dynamical Systems With a Cyclic Sign Variation Diminishing Property. Ben Avraham, T., +, TAC March 2020 941-954
- Energy-Efficient Time-Triggered Communication Policies for Wireless Networked Control Systems. Varma, V.S., +, TAC Oct. 2020 4324-4331
- Equivalence-Based Model of Dimension-Varying Linear Systems. Cheng, D., +, TAC Dec. 2020 5444-5449
- Event-Triggered Dynamic Output Feedback Control for Switched Systems With Frequent Asynchronism. *Fei*, Z., +, *TAC July 2020 3120-3127*

Explicit Iterative Algorithms for Continuous Coupled Lyapunov Matrix Equations. *Sun, H.*, +, *TAC Aug. 2020 3631-3638*

- Exponential Stabilization of Port-Hamiltonian Boundary Control Systems via Energy Shaping. Macchelli, A., +, TAC Oct. 2020 4440-4447
- Feedback Nash Equilibrium for Randomly Switching Differential–Algebraic Games. Tanwani, A., +, TAC Aug. 2020 3286-3301
- Formulas for Data-Driven Control: Stabilization, Optimality, and Robustness. De Persis, C., +, TAC March 2020 909-924
- Fully Distributed Resilient State Estimation Based on Distributed Median Solver. Lee, J.G., +, TAC Sept. 2020 3935-3942
- Geometric Programming for Optimal Positive Linear Systems. Ogura, M., +, TAC Nov. 2020 4648-4663
- Graphon Control of Large-Scale Networks of Linear Systems. Gao, S., +, TAC Oct. 2020 4090-4105
- Hankel Singular Values and LQG Characteristic Values of Discrete-Time Linear Systems in Cascade With Inner Systems. *Bucolo, M.*, +, *TAC Nov.* 2020 4989-4994
- Hybrid Systems With State-Triggered Jumps: Sensitivity-Based Stability Analysis With Application to Trajectory Tracking. *Rijnen, M.*, +, *TAC Nov.* 2020 4568-4583
- Integral Control of Stable Negative-Imaginary Systems Preceded by Hysteresis Nonlinearity. *Dey*, *A.*, +, *TAC March 2020 1333-1339*
- Integral Input-to-State Stability of Networked Control Systems. Noroozi, N., +, TAC March 2020 1203-1210
- Leader-Following Consensus for Linear Multiagent Systems via Asynchronous Sampled-Data Control. Liu, W., +, TAC July 2020 3215-3222
- Linear Hybrid Systems With Periodic Jumps: A Notion of Strong Observability and Strong Detectability. *Rios, H., +, TAC June 2020 2640-2646*
- Markov Chains With Maximum Return Time Entropy for Robotic Surveillance. Duan, X., +, TAC Jan. 2020 72-86
- Minimum Cost Feedback Selection in Structured Systems: Hardness and Approximation Algorithm. Joshi, A., +, TAC Dec. 2020 5517-5524
- Model Matching and Passivation of MIMO Linear Systems via Dynamic Output Feedback and Feedforward. Sassano, M., +, TAC Oct. 2020 4016-4030
- Moving Horizon Estimation With Unknown Inputs Under Dynamic Quantization Effects. Zou, L., +, TAC Dec. 2020 5368-5375
- MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels. *Cai, S.*, +, *TAC May 2020 2046-*2061
- Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints. *Zhu, Y*, +, *TAC May 2020 2177-2184*
- Necessary and Sufficient Bit Rate Conditions to Stabilize a Scalar Continuous-Time LTI System Based on Event Triggering. *Ling, Q., TAC April* 2020 1598-1612
- Necessary Stability Conditions for Integral Delay Systems. Ortiz, R., +, TAC Oct. 2020 4377-4384
- New Gramians for Switched Linear Systems: Reachability, Observability, and Model Reduction. *Pontes Duff, I., +, TAC June 2020 2526-2535*
- Notions of Centralized and Decentralized Opacity in Linear Systems. Ramasubramanian, B., +, TAC April 2020 1442-1455
- Observed-Mode-Dependent State Estimation of Hidden Semi-Markov Jump Linear Systems. Cai, B., +, TAC Jan. 2020 442-449
- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y.*, +, *TAC Aug. 2020 3714-3721*
- Observer-Based Robust Controller Design With Simultaneous Optimization of Scaling Matrices. Sato, M., TAC Feb. 2020 861-866
- On Algebraic Proofs of Stability for Homogeneous Vector Fields. *Ahmadi, A.A.*, +, *TAC Jan. 2020 325-332*
- On Boundedness of Error Covariances for Kalman Consensus Filtering Problems. Li, W., +, TAC June 2020 2654-2661
- On Event-Triggered Control of Nonlinear Stochastic Systems. Luo, S., +, TAC Jan. 2020 369-375
- On Local LTI Model Coherence for LPV Interpolation. Zhang, Q., +, TAC Aug. 2020 3671-3676
- On Structured Lyapunov Functions and Dissipativity in Interconnected LTI Systems. Jokic, A., +, TAC March 2020 970-985

- On Synchronization of Dynamical Systems Over Directed Switching Topologies: An Algebraic and Geometric Perspective. *Qin, J.*, +, *TAC Dec. 2020* 5083-5098
- On the Positive Effect of Delay on the Rate of Convergence of a Class of Linear Time-Delayed Systems. *Moradian, H.,* +, *TAC Nov. 2020 4832-4839*
- On Unknown Input Observers of Linear Systems: Asymptotic Unknown Input Decoupling Approach. Ichalal, D., +, TAC March 2020 1197-1202
- Opacity Enforcement for Confidential Robust Control in Linear Cyber-Physical Systems. An, L., +, TAC March 2020 1234-1241
- Optimal Continuous-Discrete Linear Filter and Moment Equations for Nonlinear Diffusions. Cacace, F., +, TAC Oct. 2020 3961-3976
- Optimal Event-Triggered Control of Nondeterministic Linear Systems. Maity, D., +, TAC Feb. 2020 604-619
- Optimal Output Regulation for Square, Overactuated and Underactuated Linear Systems. *Bernhard, S.*, +, *TAC Oct. 2020 4416-4423*
- Output Admissible Sets and Reference Governors: Saturations Are Not Constraints!. Cotorruelo, A., +, TAC March 2020 1192-1196
- Output Feedback Stabilization for a Class of First-Order Equation Setting of Collocated Well-Posed Linear Systems With Time Delay in Observation. *Guo, B., +, TAC June 2020 2612-2618*
- Parametric Optimization Based MPC for Systems of Systems With Affine Coordination Constraints. *Novoselnik, B.*, +, *TAC Feb. 2020 649-663*
- Posterior Sampling-Based Reinforcement Learning for Control of Unknown Linear Systems. *Ouyang, Y., +, TAC Aug. 2020 3600-3607*
- Predictor Feedback for Uncertain Linear Systems With Distributed Input Delays. *Zhu, Y., +, TAC Dec. 2020 5344-5351*
- Quadratic Optimal Control of Linear Complementarity Systems: First-Order Necessary Conditions and Numerical Analysis. Vieira, A., +, TAC June 2020 2743-2750
- Reachability Analysis of Large Linear Systems With Uncertain Inputs in the Krylov Subspace. *Althoff, M., TAC Feb. 2020 477-492*
- Reduced Order Controller Design for Robust Output Regulation. *Paunonen*, L., +, *TAC June 2020 2480-2493*
- Reduced-Order Observer Design for Switched Descriptor Systems With Unknown Inputs. Zhang, J., +, TAC Jan. 2020 287-294
- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. Coutinho, D., +, TAC May 2020 2300-2307
- Remote State Estimation With Stochastic Event-Triggered Sensor Schedule and Packet Drops. Xu, L., +, TAC Nov. 2020 4981-4988
- Removing SPR-Like Conditions in Adaptive Feedforward Control of Uncertain Systems. Wang, Y., +, TAC June 2020 2309-2324
- Riemannian Optimal Identification Method for Linear Systems With Symmetric Positive-Definite Matrix. Sato, K., +, TAC Nov. 2020 4493-4508
- Robust Cooperative Output Regulation of Heterogeneous Uncertain Linear Multiagent Systems With Time-Varying Communication Topologies. *Wang, L., +, TAC Oct. 2020 4340-4347*
- Robust Economic Model Predictive Control of Continuous-Time Epidemic Processes. Watkins, N.J., +, TAC March 2020 1116-1131
- Robust Feedback Stabilization of Linear MIMO Systems Using Generalized Homogenization. Zimenko, K., +, TAC Dec. 2020 5429-5436
- Scheduling Multiple Agents in a Persistent Monitoring Task Using Reachability Analysis. Yu, X., +, TAC April 2020 1499-1513
- Secure and Private Implementation of Dynamic Controllers Using Semihomomorphic Encryption. *Murguia, C., +, TAC Sept. 2020 3950-3957*
- Semi-Markov Jump Linear Systems With Incomplete Sojourn and Transition Information: Analysis and Synthesis. Ning, Z., +, TAC Jan. 2020 159-174
- Set Membership Identification of Linear Systems With Guaranteed Simulation Accuracy. Lauricella, M., +, TAC Dec. 2020 5189-5204
- Set-Valued Feedback Control and Its Application to Event-Triggered Sampled-Data Systems. *Jiang, Y.*, +, *TAC Nov. 2020 4965-4972*
- Smooth Interpolation of Covariance Matrices and Brain Network Estimation: Part II. Ning, L., TAC May 2020 1901-1910
- Stability Analysis of Discrete-Time Semi-Markov Jump Linear Systems. Wang, B., +, TAC Dec. 2020 5415-5421
- Stability Analysis of Dissipative Systems Subject to Nonlinear Damping via Lyapunov Techniques. Marx, S., +, TAC May 2020 2139-2146

- Stability Analysis of Linear Coupled Differential-Difference Systems With General Distributed Delays. *Feng*, Q., +, *TAC March 2020 1356-1363*
- Stability and Stabilization of Infinite Delay Systems: A Lyapunov-Based Approach. Xu, X., +, TAC Nov. 2020 4509-4524
- Stability-Preserving Morse Normal Form. Kucera, V., TAC Dec. 2020 5099-5113
- Stabilization for Infinite-Dimensional Switched Linear Systems. Zheng, G., +, TAC Dec. 2020 5456-5463
- Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907
- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984
- Stabilization of Two-Port Networked Systems With Simultaneous Uncertainties in Plant, Controller, and Communication Channels. *Zhao, D.*, +, *TAC March 2020 1160-1175*
- Structural Characterization of Linear Quantum Systems With Application to Back-Action Evading Measurement. Zhang, G., +, TAC July 2020 3157-3163
- Structural Controller for Logical Expression of Linear Constraints on Petri Nets. Luo, J., +, TAC Jan. 2020 397-403
- Structured Feedback Synthesis for Stability and Performance of Switched Systems. Chesi, G., +, TAC Nov. 2020 4695-4709
- Switched Systems With Multiple Equilibria Under Disturbances: Boundedness and Practical Stability. Veer, S., +, TAC June 2020 2371-2386
- The Time-Invariant Multidimensional Gaussian Sequential Rate-Distortion Problem Revisited. *Stavrou, P.A.*, +, *TAC May 2020 2245-2249*
- The Value of Timing Information in Event-Triggered Control. *Khojasteh, M.J.*, +, *TAC March 2020 925-940*
- Toward a Comprehensive Impossibility Result for String Stability. *Farnam, A.*, +, *TAC April 2020 1652-1659*
- Well-Posedness of Time-Varying Linear Systems. Kurula, M., TAC Oct. 2020 4075-4089

Linearization techniques

- Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning. Umlauft, J., +, TAC Oct. 2020 4154-4169
- Performance Recovery of Dynamic Feedback-Linearization Methods for Multivariable Nonlinear Systems. *Wu, Y., +, TAC April 2020 1365-1380*

Load (electric)

A Tool for Analysis of Existence of Equilibria and Voltage Stability in Power Systems With Constant Power Loads. *Matveev, A.S.*, +, *TAC Nov. 2020* 4726-4740

Load flow

Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401

Load regulation

Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads. *Kim, H.,* +, *TAC Nov. 2020 4887-4894*

Lyapunov matrix equations

- Analysis and Computation of the H_2 Norm of Delay Differential Algebraic Equations. *Gomez, M.A.*, +, *TAC May 2020 2192-2199*
- Explicit Iterative Algorithms for Continuous Coupled Lyapunov Matrix Equations. *Sun, H.*, +, *TAC Aug. 2020 3631-3638*
- Necessary Stability Conditions for Integral Delay Systems. Ortiz, R., +, TAC Oct. 2020 4377-4384
- New Gramians for Switched Linear Systems: Reachability, Observability, and Model Reduction. *Pontes Duff, I.*, +, *TAC June 2020 2526-2535*
- Stabilization of Nonlinear Dynamic Systems Over Limited Capacity Communication Channels. Sanjaroon, V., +, TAC Aug. 2020 3655-3662

Lyapunov methods

- A Complete Characterization of Integral Input-to-State Stability and Its Small-Gain Theorem for Stochastic Systems. *Ito, H., TAC July 2020 3039-3052*
- A Globally Stable Algorithm for the Integration of High-Index Differential-Algebraic Systems. *Franco*, *P.D.*, +, *TAC May 2020 2107-2122*
- A Lyapunov-Like Characterization of Predefined-Time Stability. Jimenez-Rodriguez, E., +, TAC Nov. 2020 4922-4927

- A Smooth Double Proximal Primal-Dual Algorithm for a Class of Distributed Nonsmooth Optimization Problems. *Wei*, *Y*, +, *TAC April 2020 1800-1806*
- A Switching Controller for a Class of MIMO Bilinear Systems With Time Delay. *Sanchez, T.,* +, *TAC May 2020 2250-2256*
- Adaptive State-Feedback Stabilization of Stochastic High-Order Nonlinear Systems With Time-Varying Powers and Stochastic Inverse Dynamics. *Li*, *G.*, +, *TAC Dec. 2020 5360-5367*
- Adding Integral Action for Open-Loop Exponentially Stable Semigroups and Application to Boundary Control of PDE Systems. *Terrand-Jeanne*, *A.*, +, *TAC Nov. 2020 4481-4492*
- Almost Global Stability of Nonlinear Switched Systems With Time-Dependent Switching. *Karabacak*, O., +, *TAC July 2020 2969-2978*
- An Explicit Reference Governor for the Intersection of Concave Constraints. Hosseinzadeh, M., +, TAC Jan. 2020 1-11
- An LMI Approach to Stability Analysis of Coupled Parabolic Systems. Wakaiki, M., TAC Jan. 2020 404-411
- Asymptotic Stability Analysis of Discrete-Time Switched Cascade Nonlinear Systems With Delays. *Liu*, *X.*, +, *TAC June 2020 2686-2692*
- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F, +, TAC May 2020 2163-2170
- Cascades-Based Leader–Follower Formation Tracking and Stabilization of Multiple Nonholonomic Vehicles. *Maghenem, M.A.*, +, *TAC Aug. 2020* 3639-3646
- Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty. *Zheng, X*, +, *TAC March 2020 1310-1317*
- Continuous Control for Fully Damped Mechanical Systems With Input Constraints: Finite-Time and Exponential Tracking. Zamora-Gomez, G.I., +, TAC Feb. 2020 882-889
- Continuous-Time Integral Dynamics for a Class of Aggregative Games With Coupling Constraints. De Persis, C., +, TAC May 2020 2171-2176
- Contraction Analysis of Monotone Systems via Separable Functions. Kawano, Y., +, TAC Aug. 2020 3486-3501
- Convex Searches for Discrete-Time Zames–Falb Multipliers. Carrasco, J., +, TAC Nov. 2020 4538-4553
- Decentralized Goal Assignment and Safe Trajectory Generation in Multirobot Networks via Multiple Lyapunov Functions. *Panagou, D.*, +, *TAC Aug. 2020 3365-3380*
- Discrete-Time Systems With Constrained Time Delays and Delay-Dependent Lyapunov Functions. *Pepe, P., TAC April 2020 1724-1730*
- Distributed Consensus Observer for Multiagent Systems With High-Order Integrator Dynamics. Zuo, Z., +, TAC April 2020 1771-1778
- Distributed Consensus Over Markovian Packet Loss Channels. Xu, L., +, TAC Jan. 2020 279-286
- Distributed Model Predictive Control for Linear Systems With Adaptive Terminal Sets. Darivianakis, G., +, TAC March 2020 1044-1056
- Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads. *Kim, H.,* +, *TAC Nov. 2020 4887-4894*
- Dynamical Systems With a Cyclic Sign Variation Diminishing Property. *Ben Avraham, T.*, +, *TAC March 2020 941-954*
- Energy-to-Peak Filtering of Semi-Markov Jump Systems With Mismatched Modes. Xu, Z., +, TAC Oct. 2020 4356-4361
- Event-Triggered H_{∞} Control of Networked Control Systems With Distributed Transmission Delay. *Yan, S.*, +, *TAC Oct. 2020 4295-4301*
- Event-Triggered Adaptive Control for a Class of Nonlinear Systems With Unknown Control Direction and Sensor Faults. *Wang, C.*, +, *TAC Feb.* 2020 763-770
- Event-Triggered Bipartite Consensus for Multiagent Systems: A Zeno-Free Analysis. Yu, H., +, TAC Nov. 2020 4866-4873
- Event-Triggered Dynamic Output Feedback Control for Switched Systems With Frequent Asynchronism. *Fei*, Z., +, *TAC July 2020 3120-3127*
- Event-Triggered Global Finite-Time Control for a Class of Uncertain Nonlinear Systems. Zhang, C., +, TAC March 2020 1340-1347
- Event-Triggered Stabilization for Continuous-Time Stochastic Systems. *Li*, *F*, +, *TAC Oct. 2020 4031-4046*

- Finite-Time Sliding-Mode Control of Markovian Jump Cyber-Physical Systems Against Randomly Occurring Injection Attacks. Cao, Z., +, TAC March 2020 1264-1271
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*
- Higher Order Sliding Mode Control Using Discontinuous Integral Action. Cruz-Zavala, E., +, TAC Oct. 2020 4316-4323
- Hybrid Systems With Delayed Jumps: Asymptotic Stability via Robustness and Lyapunov Conditions. *Altin, B., +, TAC Aug. 2020 3381-3396*
- Input-to-State Stability of a Clamped-Free Damped String in the Presence of Distributed and Boundary Disturbances. *Lhachemi, H.*, +, *TAC March* 2020 1248-1255
- Input-to-State Stability of Time-Delay Systems With Delay-Dependent Impulses. *Liu*, *X*., +, *TAC April 2020 1676-1682*
- Integral Input-to-State Stability of Networked Control Systems. Noroozi, N., +, TAC March 2020 1203-1210
- Leader-Following Consensus for Linear Multiagent Systems via Asynchronous Sampled-Data Control. Liu, W., +, TAC July 2020 3215-3222
- Lyapunov Criterion for Stochastic Systems and Its Applications in Distributed Computation. *Qin*, *Y*, +, *TAC Feb. 2020 546-560*
- Lyapunov Event-Triggered Stabilization With a Known Convergence Rate. *Proskurnikov, A.V.,* +, *TAC Feb. 2020 507-521*
- Lyapunov Stability Analysis of the Implicit Discrete-Time Twisting Control Algorithm. *Huber, O.,* +, *TAC June 2020 2619-2626*
- Lyapunov Stability for Impulsive Systems via Event-Triggered Impulsive Control. Li, X., +, TAC Nov. 2020 4908-4913
- Multilevel Power-Imbalance Allocation Control for Secondary Frequency Control of Power Systems. *Xi, K.*, +, *TAC July 2020 2913-2928*
- Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints. *Zhu, Y*, +, *TAC May 2020 2177-2184*
- Necessary and Sufficient Conditions for 2pth Moment Stability of Several Classes of Linear Stochastic Systems. *Luo, S.*, +, *TAC July 2020 3084-3091*
- Necessary Stability Conditions for Integral Delay Systems. Ortiz, R., +, TAC Oct. 2020 4377-4384
- New Gramians for Switched Linear Systems: Reachability, Observability, and Model Reduction. *Pontes Duff, I., +, TAC June 2020 2526-2535*
- Nonanticipating Lyapunov Functions for Persistently Excited Nonlinear Systems. Verrelli, C.M., +, TAC June 2020 2634-2639
- Nonlinearity Estimator-Based Control of A Class of Uncertain Nonlinear Systems. Yang, J., +, TAC May 2020 2230-2236
- Observed-Mode-Dependent State Estimation of Hidden Semi-Markov Jump Linear Systems. *Cai, B.*, +, *TAC Jan. 2020 442-449*
- Observer Design For a Class of Parabolic Systems With Large Delays and Sampled Measurements. *Ahmed-Ali*, *T.*, +, *TAC May 2020 2200-2206*
- Observer Design for Nonlinear Systems With Output Transformation. de Cossio, F.G., +, TAC Dec. 2020 5205-5219
- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y.*, +, *TAC Aug. 2020 3714-3721*
- On Algebraic Proofs of Stability for Homogeneous Vector Fields. *Ahmadi*, *A.A.*, +, *TAC Jan. 2020 325-332*
- On Boundedness of Error Covariances for Kalman Consensus Filtering Problems. Li, W., +, TAC June 2020 2654-2661
- On Convergence for Piecewise Affine Models of Gene Regulatory Networks via a Lyapunov Approach. *Pasquini, M., +, TAC Aug. 2020 3333-3348*
- On Structured Lyapunov Functions and Dissipativity in Interconnected LTI Systems. Jokic, A., +, TAC March 2020 970-985
- On the Existence of Block-Diagonal Solutions to Lyapunov and \mathcal{H}_{∞} Riccati Inequalities. *Sootla*, *A*., +, *TAC July 2020 3170-3175*
- On the Stabilization of an Overhead Crane System With Dynamic and Delayed Boundary Conditions. *Chentouf, B.,* +, *TAC Oct. 2020 4273-4280*
- Quasi-Polynomial-Based Robust Stability of Time-Delay Systems Can be Less Conservative Than Lyapunov–Krasovskii Approaches. Angulo, S., +, TAC July 2020 3164-3169

RBFNN-Based Minimum Entropy Filtering for a Class of Stochastic Nonlinear Systems. Yin, X., +, TAC Jan. 2020 376-381

- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. Coutinho, D., +, TAC May 2020 2300-2307
- Regulation of Inhomogeneous Drilling Model With a P-I Controller. Terrand-Jeanne, A., +, TAC Jan. 2020 58-71
- Robust Motion Planning for Uncertain Systems With Disturbances Using the Invariant-Set Motion Planner. Danielson, C., +, TAC Oct. 2020 4456-4463

Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. *Qi, W.*, +, *TAC Jan. 2020 361-368*

- Stability Analysis for a Class of Linear 2 × 2 Hyperbolic PDEs Using a Backstepping Transform. *Bou Saba*, *D.*, +, *TAC July 2020 2941-2956*
- Stability Analysis of Dissipative Systems Subject to Nonlinear Damping via Lyapunov Techniques. Marx, S., +, TAC May 2020 2139-2146
- Stability Analysis of Linear Coupled Differential-Difference Systems With General Distributed Delays. *Feng, Q., +, TAC March 2020 1356-1363*
- Stability Analysis of Linear Partial Differential Equations With Generalized Energy Functions. *Gahlawat, A.*, +, *TAC May 2020 1924-1939*
- Stability and Stabilization of Infinite Delay Systems: A Lyapunov-Based Approach. Xu, X., +, TAC Nov. 2020 4509-4524

Stabilization of Networked Control Systems Under DoS Attacks and Output Quantization. Wakaiki, M., +, TAC Aug. 2020 3560-3575

- Stabilization of Switched Linear Systems Subject to Actuator Saturation via Invariant Semiellipsoids. *Lian, J.*, +, *TAC Oct. 2020 4332-4339*
- Stochastic Semistability for Nonlinear Dynamical Systems With Application to Consensus on Networks With Communication Uncertainty. *Haddad*, *W.M.*, +, *TAC July 2020 2826-2841*
- Structured Feedback Synthesis for Stability and Performance of Switched Systems. Chesi, G., +, TAC Nov. 2020 4695-4709
- Switched Systems With Multiple Equilibria Under Disturbances: Boundedness and Practical Stability. Veer, S., +, TAC June 2020 2371-2386
- Synthesizing Communication Plans for Reachability and Safety Specifications. Hashimoto, K., +, TAC Feb. 2020 561-576
- The Implicit Discretization of the Supertwisting Sliding-Mode Control Algorithm. Brogliato, B., +, TAC Aug. 2020 3707-3713
- Tracking Control of Nonlinear Networked and Quantized Control Systems With Communication Delays. *Ren, W.*, +, *TAC Aug. 2020 3685-3692*
- Trajectory-Constrained Collective Circular Motion With Different Phase Arrangements. Jain, A., +, TAC May 2020 2237-2244
- Uniform Input-To-State Stability for Switched and Time-Varying Impulsive Systems. *Mancilla-Aguilar, J.L.*, +, *TAC Dec. 2020 5028-5042*
- When Is a Nonlinear System Semiglobally Asymptotically Stabilizable by Digital Feedback?. *Lin, W., TAC Nov. 2020 4584-4599*

M

Machine control

Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. *Qi*, *W*., +, *TAC Jan. 2020 361-368*

Machine learning

On the Use of Supervised Clustering in Stochastic NMPC Design. *Alamir,* M., TAC Dec. 2020 5392-5398

Manipulator dynamics

Dynamic Modularity Approach to Adaptive Control of Robotic Systems With Closed Architecture. *Wang, H., +, TAC June 2020 2760-2767*

Manipulators

Markov processes

- p-Safe Analysis of Stochastic Hybrid Processes. Wisniewski, R., +, TAC Dec. 2020 5220-5235
- A Forgetting Property of Reciprocal Chains. Bruce-Doust, R., +, TAC Nov. 2020 4854-4859
- A Generalized Framework For Kullback–Leibler Markov Aggregation. *Amjad, R.A.,* +, *TAC July 2020 3068-3075*
- A Universal Empirical Dynamic Programming Algorithm for Continuous State MDPs. *Haskell, W.B.*, +, *TAC Jan. 2020 115-129*

- An Improved Homogeneous Polynomial Approach for Adaptive Sliding-Mode Control of Markov Jump Systems With Actuator Faults. *Du, C.*, +, *TAC March 2020 955-969*
- Analyzing Controllability of Bilinear Systems on Symmetric Groups: Mapping Lie Brackets to Permutations. Zhang, W., +, TAC Nov. 2020 4895-4901
- Asymptotic Optimality of Finite Model Approximations for Partially Observed Markov Decision Processes With Discounted Cost. Saldi, N., +, TAC Jan. 2020 130-142
- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
- Compositional (In)Finite Abstractions for Large-Scale Interconnected Stochastic Systems. *Lavaei*, A., +, TAC Dec. 2020 5280-5295
- Constrained Subspace Method for the Identification of Structured State-Space Models (COSMOS). Yu, C., +, TAC Oct. 2020 4201-4214
- Corrections to "Model Predictive Control for Stochastic Max-Plus Linear Systems With Chance Constraints,". *Boom, T.J.J.v.d.*, +, *TAC Feb. 2020* 905-906
- Distributed Consensus Over Markovian Packet Loss Channels. Xu, L., +, TAC Jan. 2020 279-286
- Energy-to-Peak Filtering of Semi-Markov Jump Systems With Mismatched Modes. Xu, Z., +, TAC Oct. 2020 4356-4361
- Entropy Maximization for Markov Decision Processes Under Temporal Logic Constraints. Savas, Y., +, TAC April 2020 1552-1567
- Feedback Nash Equilibrium for Randomly Switching Differential–Algebraic Games. *Tanwani*, A., +, *TAC Aug. 2020 3286-3301*
- Finding the Equilibrium for Continuous Constrained Markov Games Under the Average Criteria. *Jiang, X., +, TAC Dec. 2020 5399-5406*
- Gaussian Conditionally Markov Sequences: Singular/Nonsingular. Rezaie, R., +, TAC May 2020 2286-2293
- Information Relaxation Bounds for Partially Observed Markov Decision Processes. *Haugh, M.B.*, +, *TAC Aug. 2020 3256-3271*
- Inverse Risk-Sensitive Reinforcement Learning. Ratliff, L.J., +, TAC March 2020 1256-1263
- Markov Chains With Maximum Return Time Entropy for Robotic Surveillance. Duan, X., +, TAC Jan. 2020 72-86
- MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels. *Cai, S.*, +, *TAC May 2020 2046-2061*
- Observed-Mode-Dependent State Estimation of Hidden Semi-Markov Jump Linear Systems. *Cai, B.,* +, *TAC Jan. 2020 442-449*
- Optimizing Attack Schedules Based on Energy Dispatch Over Two-Hop Relay Networks. *Gan, R.*, +, *TAC Sept. 2020 3832-3846*
- Over-Approximation of Fluid Models. Tschaikowski, M., TAC March 2020 999-1013
- Quantized Nonstationary Filtering of Networked Markov Switching RSNSs: A Multiple Hierarchical Structure Strategy. *Cheng, J.*, +, *TAC Nov. 2020* 4816-4823
- Remote Estimation Over a Packet-Drop Channel With Markovian State. *Chakravorty, J.*, +, *TAC May 2020 2016-2031*
- Renewal Monte Carlo: Renewal Theory-Based Reinforcement Learning. Subramanian, J., +, TAC Aug. 2020 3663-3670
- Risk Probability Minimization Problems for Continuous-Time Markov Decision Processes on Finite Horizon. *Huo, H.*, +, *TAC July 2020 3199-3206*
- Semi-Markov Jump Linear Systems With Incomplete Sojourn and Transition Information: Analysis and Synthesis. Ning, Z., +, TAC Jan. 2020 159-174
- Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. *Qi, W.*, +, *TAC Jan. 2020 361-368*
- Stability Theory of Stochastic Models in Opinion Dynamics. Askarzadeh, Z., +, TAC Feb. 2020 522-533
- Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907
- State-Space Realizations and Optimal Smoothing for Gaussian Generalized Reciprocal Processes. *White, L.B.*, +, *TAC Jan. 2020 389-396*
- Stochastic Control Approach to Reputation Games. *Dalkiran, N.A.*, +, *TAC Nov. 2020 4710-4725*

Leader-Following Consensus for a Class of Multiple Robot Manipulators over Switching Networks by Distributed Position Feedback Control. *He*, *C.*, +, *TAC Feb. 2020 890-896*

- Stochastic Semistability for Nonlinear Dynamical Systems With Application to Consensus on Networks With Communication Uncertainty. *Haddad*, *W.M.*, +, *TAC July 2020 2826-2841*
- The Time-Invariant Multidimensional Gaussian Sequential Rate-Distortion Problem Revisited. *Stavrou, P.A.*, +, *TAC May 2020 2245-2249*
- UD-Based Pairwise and MIMO Kalman-Like Filtering for Estimation of Econometric Model Structures. *Kulikova, M.V.*, +, *TAC Oct. 2020 4472-4479*
- Whittle Index Policy for Dynamic Multichannel Allocation in Remote State Estimation. *Wang, J.*, +, *TAC Feb. 2020 591-603*

Materials handling

Efficient Liveness Assessment for Traffic States in Open, Irreversible, Dynamically Routed, Zone-Controlled Guidepath-Based Transport Systems. *Reveliotis*, S., +, *TAC July 2020 2883-2898*

Mathematical model

- A Note on Relative Controllability of Higher Order Linear Delayed Discrete Systems. *Diblik, J.*, +, *TAC Dec. 2020 5472-5479*
- Accurate Uncertainty Propagation for Discrete-Time Nonlinear Systems Using Differential Inequalities With Model Redundancy. *Yang, X.*, +, *TAC Dec. 2020 5043-5057*
- Global Stabilization of Uncertain Lotka–Volterra Systems via Positive Nonlinear State Feedback. Badri, V., +, TAC Dec. 2020 5450-5455

Mathematical operators

On the Well-Posedness of a Parametric Spectral Estimation Problem and Its Numerical Solution. *Zhu, B., TAC March 2020 1089-1099*

Mathematical programming

Proximal Algorithms for Large-Scale Statistical Modeling and Sensor/Actuator Selection. Zare, A., +, TAC Aug. 2020 3441-3456

Mathematics computing

Scalable, Distributed Algorithms for Solving Linear Equations via Double-Layered Networks. *Wang, X.*, +, *TAC March 2020 1132-1143*

Matrix algebra

- A Common Framework for Complete and Incomplete Attitude Synchronization in Networks With Switching Topology. *Pereira*, *P.O.*, +, *TAC Jan*. 2020 271-278
- A Forgetting Property of Reciprocal Chains. Bruce-Doust, R., +, TAC Nov. 2020 4854-4859
- A Note on Uniform Exponential Stability of Linear Periodic Time-Varying Systems. Vrabel, R., TAC April 2020 1647-1651
- A Novel Method to Compute the Structured Distance to Instability for Combined Uncertainties on Delays and System Matrices. *Borgioli, F.*, +, *TAC April 2020 1747-1754*
- A Suboptimality Approach to Distributed Linear Quadratic Optimal Control. *Jiao, J.*, +, *TAC March 2020 1218-1225*
- Asymptotical Stability of Probabilistic Boolean Networks With State Delays. Zhu, S., +, TAC April 2020 1779-1784
- Consensus and Disagreement of Heterogeneous Belief Systems in Influence Networks. Ye, M., +, TAC Nov. 2020 4679-4694
- Decentralized Optimization Over Time-Varying Directed Graphs With Row and Column-Stochastic Matrices. *Saadatniaki*, F., +, *TAC Nov. 2020 4769-4780*
- Distributed Event-Triggered Gradient Method for Constrained Convex Minimization. Liu, C., +, TAC Feb. 2020 778-785
- Distributed Multiagent Convex Optimization Over Random Digraphs. Alaviani, S.S., +, TAC March 2020 986-998
- Distributed Optimal Coordination for Heterogeneous Linear Multiagent Systems With Event-Triggered Mechanisms. *Li*, *Z.*, +, *TAC April 2020* 1763-1770
- Disturbance Attenuation by Measurement Feedback in Nonlinear Systems via Immersion and Algebraic Conditions. *Mylvaganam, T.*, +, *TAC Feb.* 2020 854-860
- Dynamical Systems With a Cyclic Sign Variation Diminishing Property. Ben Avraham, T., +, TAC March 2020 941-954
- Finite-Time Stability of Network Systems With Discontinuous Dynamics Over Signed Digraphs. *Shi*, X, +, *TAC Nov. 2020 4874-4881*

Geometric Programming for Optimal Positive Linear Systems. Ogura, M., +, TAC Nov. 2020 4648-4663

- Heterogeneous Hegselmann–Krause Dynamics With Environment and Communication Noise. Chen, G., +, TAC Aug. 2020 3409-3424
- Identification of Linear Models From Quantized Data: A Midpoint-Projection Approach. *Risuleo, R.S.,* +, *TAC July 2020 2801-2813*
- Integral Control of Stable Negative-Imaginary Systems Preceded by Hysteresis Nonlinearity. *Dey, A.*, +, *TAC March 2020 1333-1339*
- Koopman-Based Lifting Techniques for Nonlinear Systems Identification. Mauroy, A., +, TAC June 2020 2550-2565
- Linear Hybrid Systems With Periodic Jumps: A Notion of Strong Observability and Strong Detectability. *Rios, H., +, TAC June 2020 2640-2646*
- Lyapunov Criterion for Stochastic Systems and Its Applications in Distributed Computation. *Qin*, *Y*, +, *TAC Feb. 2020 546-560*
- Model Predictive Tracking Control for Invariant Systems on Matrix Lie Groups via Stable Embedding Into Euclidean Spaces. *Chang, D.E.*, +, *TAC July 2020 3191-3198*
- Model Reduction of Markovian Jump Systems With Uncertain Probabilities. *Shen, Y., +, TAC Jan. 2020 382-388*
- Necessary and Sufficient Topological Conditions for Identifiability of Dynamical Networks. van Waarde, H.J., +, TAC Nov. 2020 4525-4537
- Nonanticipating Lyapunov Functions for Persistently Excited Nonlinear Systems. Verrelli, C.M., +, TAC June 2020 2634-2639
- On Boundedness of Error Covariances for Kalman Consensus Filtering Problems. Li, W., +, TAC June 2020 2654-2661
- Opacity Enforcement for Confidential Robust Control in Linear Cyber-Physical Systems. An, L., +, TAC March 2020 1234-1241
- Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. *Wu, G.*, +, *TAC Sept. 2020 3919-3926*
- Passivity-Based Control for Hidden Markov Jump Systems With Singular Perturbations and Partially Unknown Probabilities. *Li, F., +, TAC Aug.* 2020 3701-3706
- Performance Improvement via Iterative Connection of Passive Systems. Urata, K., +, TAC March 2020 1325-1332
- Push-Sum on Random Graphs: Almost Sure Convergence and Convergence Rate. *Rezaienia*, *P*, +, *TAC March 2020 1295-1302*
- Quantum State Filter With Disturbance and Noise. Zhang, J., +, TAC July 2020 2856-2866
- Randomized Gradient-Free Distributed Optimization Methods for a Multiagent System With Unknown Cost Function. *Pang, Y.*, +, *TAC Jan. 2020* 333-340
- Riemannian Optimal Identification Method for Linear Systems With Symmetric Positive-Definite Matrix. Sato, K., +, TAC Nov. 2020 4493-4508
- Secure State Estimation for Multiagent Systems With Faulty and Malicious Agents. Lu, A., +, TAC Aug. 2020 3471-3485
- Stabilization of Two-Port Networked Systems With Simultaneous Uncertainties in Plant, Controller, and Communication Channels. *Zhao, D.*, +, *TAC March 2020 1160-1175*
- Strong Structural Controllability of Systems on Colored Graphs. Jia, J., +, TAC Oct. 2020 3977-3990
- Structuring Multilevel Discrete-Event Systems With Dependence Structure Matrices. *Goorden, M.*, +, *TAC April 2020 1625-1639*

Matrix decomposition

A Bounded-Variable Least-Squares Solver Based on Stable QR Updates. Saraf, N., +, TAC March 2020 1242-1247

Novel All-Pass Factorization, All Solutions to Rational Matrix Equation and Control Application. *Stefanovski, J., TAC July 2020 3176-3183*

Maximum likelihood estimation

Identification of Linear Models From Quantized Data: A Midpoint-Projection Approach. *Risuleo, R.S.,* +, *TAC July 2020 2801-2813*

Interaction-Based Distributed Learning in Cyber-Physical and Social Networks. Sasso, F., +, TAC Jan. 2020 223-236

Maximum principle

Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. *Wu, G.*, +, *TAC Sept. 2020 3919-3926*

Mean square error methods

An Event-Based Stealthy Attack on Remote State Estimation. Cheng, P., +, TAC Oct. 2020 4348-4355

Symmetry Reduction in Optimal Control of Multiagent Systems on Lie Groups. Colombo, L.J., +, TAC Nov. 2020 4973-4980

- Consensus of Multi-Agent Systems Under Binary-Valued Measurements and Recursive Projection Algorithm. *Wang, T.*, +, *TAC June 2020 2678-2685*
- MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels. *Cai, S., +, TAC May 2020 2046-2061*
- Remote State Estimation With Stochastic Event-Triggered Sensor Schedule and Packet Drops. Xu, L., +, TAC Nov. 2020 4981-4988
- SI-ADMM: A Stochastic Inexact ADMM Framework for Stochastic Convex Programs. Xie, Y, +, TAC June 2020 2355-2370
- The Time-Invariant Multidimensional Gaussian Sequential Rate-Distortion Problem Revisited. *Stavrou, P.A.*, +, *TAC May 2020 2245-2249*

Mechanical products

Continuous Control for Fully Damped Mechanical Systems With Input Constraints: Finite-Time and Exponential Tracking. Zamora-Gomez, G.I., +, TAC Feb. 2020 882-889

Mechanical systems

- Correction to the Paper "A Robust IDA-PBC Approach for Handling Uncertainties in Underactuated Mechanical Systems" [Oct 18 3495-3502]. *Donaire*, A., +, *TAC July 2020 3223-3226*
- Minimal Series–Parallel Network Realizations of Bicubic Impedances. Hughes, T.H., TAC Dec. 2020 4997-5011

Mechanical variables control

Global Sliding Mode Observers for Some Uncertain Mechanical Systems. Apaza-Perez, W.A., +, TAC March 2020 1348-1355

Medical control systems

Robust Economic Model Predictive Control of Continuous-Time Epidemic Processes. Watkins, N.J., +, TAC March 2020 1116-1131

Medical image processing

Smooth Interpolation of Covariance Matrices and Brain Network Estimation: Part II. Ning, L., TAC May 2020 1901-1910

Memoryless systems

```
Metric and Topological Entropy Bounds for Optimal Coding of Stochastic Dynamical Systems. Kawan, C., +, TAC June 2020 2466-2479
```

Method of moments

p-Safe Analysis of Stochastic Hybrid Processes. Wisniewski, R., +, TAC Dec. 2020 5220-5235

Microorganisms

A Robust Asymptotic Observer for Systems That Converge to Unobservable States—A Batch Reactor Case Study. *Rapaport, A.*, +, *TAC June 2020* 2693-2699

Military aircraft

A New Method for Control Allocation of Aircraft Flight Control System. Yang, Y., +, TAC April 2020 1413-1428

MIMO communication

Output Feedback Approximation-Free Prescribed Performance Tracking Control for Uncertain MIMO Nonlinear Systems. *Dimanidis, I.S.*, +, *TAC Dec. 2020 5058-5069*

Robust Feedback Stabilization of Linear MIMO Systems Using Generalized Homogenization. Zimenko, K., +, TAC Dec. 2020 5429-5436

UD-Based Pairwise and MIMO Kalman-Like Filtering for Estimation of Econometric Model Structures. *Kulikova, M.V.*, +, *TAC Oct. 2020 4472-4479*

MIMO systems

- A Switching Controller for a Class of MIMO Bilinear Systems With Time Delay. *Sanchez, T.,* +, *TAC May 2020 2250-2256*
- Adaptive Control for a Class of Multi-Input Multi-Output Plants With Arbitrary Relative Degree. Qu, Z., +, TAC July 2020 3023-3038
- Cascading With Inner Systems: Hankel Singular Values and Characteristic Values. *Buscarino, A., +, TAC Feb. 2020 727-732*
- Integral Control of Stable Negative-Imaginary Systems Preceded by Hysteresis Nonlinearity. *Dey, A.*, +, *TAC March 2020 1333-1339*
- Model Matching and Passivation of MIMO Linear Systems via Dynamic Output Feedback and Feedforward. Sassano, M., +, TAC Oct. 2020 4016-4030

When Is a Nonlinear System Semiglobally Asymptotically Stabilizable by Digital Feedback?. *Lin, W., TAC Nov. 2020 4584-4599*

Minimax techniques

- Constrained Adaptive Model-Predictive Control for a Class of Discrete-Time Linear Systems With Parametric Uncertainties. *Zhu, B., +, TAC May 2020* 2223-2229
- Cooperative Data-Driven Distributionally Robust Optimization. *Cherukuri, A.*, +, *TAC Oct. 2020 4400-4407*
- Solutions for Multiagent Pursuit-Evasion Games on Communication Graphs: Finite-Time Capture and Asymptotic Behaviors. *Lopez, V.G.*, +, *TAC May 2020 1911-1923*

Minimization

- Collective Stochastic Discrete Choice Problems: A Min-LQG Dynamic Game Formulation. *Salhab, R., +, TAC Aug. 2020 3302-3316*
- Distributed Coupled Multiagent Stochastic Optimization. Alghunaim, S.A., +, TAC Jan. 2020 175-190
- Distributed Event-Triggered Gradient Method for Constrained Convex Minimization. Liu, C., +, TAC Feb. 2020 778-785
- Distributed Heavy-Ball: A Generalization and Acceleration of First-Order Methods With Gradient Tracking. Xin, R., +, TAC June 2020 2627-2633
- Distributed Second-Order Methods With Increasing Number of Working Nodes. Jerinkic, N.K., +, TAC Feb. 2020 846-853
- Dynamic Sharing Through the ADMM. Cao, X., +, TAC May 2020 2215-2222
- Online Distributed Optimization With Strongly Pseudoconvex-Sum Cost Functions. Lu, K., +, TAC Jan. 2020 426-433
- Optimal Construction of Koopman Eigenfunctions for Prediction and Control. *Korda, M.*, +, *TAC Dec. 2020 5114-5129*
- SI-ADMM: A Stochastic Inexact ADMM Framework for Stochastic Convex Programs. *Xie, Y., +, TAC June 2020 2355-2370*

Minimum entropy methods

RBFNN-Based Minimum Entropy Filtering for a Class of Stochastic Nonlinear Systems. Yin, X., +, TAC Jan. 2020 376-381

Mobile robots

- Cascades-Based Leader–Follower Formation Tracking and Stabilization of Multiple Nonholonomic Vehicles. *Maghenem, M.A.*, +, *TAC Aug. 2020* 3639-3646
- Distributed Leader–Follower Affine Formation Maneuver Control for High-Order Multiagent Systems. Chen, L., +, TAC Nov. 2020 4941-4948
- Dynamic Attitude Planning for Trajectory Tracking in Thrust-Vectoring UAVs. Invernizzi, D., +, TAC Jan. 2020 453-460
- Limit-Cycle-Based Design of Formation Control for Mobile Agents. *Wang*, *C.*, +, *TAC Aug. 2020 3530-3543*
- Markov Chains With Maximum Return Time Entropy for Robotic Surveillance. Duan, X., +, TAC Jan. 2020 72-86
- Multiagent Flocking With Angle-Based Formation Shape Control. Jing, G., +, TAC Feb. 2020 817-823
- Polling-Systems-Based Autonomous Vehicle Coordination in Traffic Intersections With No Traffic Signals. *Miculescu, D.*, +, *TAC Feb. 2020 680-694*
- Ratio-of-Distance Rigidity Theory With Application to Similar Formation Control. *Cao, K.*, +, *TAC June 2020 2598-2611*
- Resilient Leader-Follower Consensus to Arbitrary Reference Values in Time-Varying Graphs. Usevitch, J., +, TAC April 2020 1755-1762
- Resilient Output Containment of Heterogeneous Cooperative and Adversarial Multigroup Systems. Zuo, S., +, TAC July 2020 3104-3111
- Stochastic Artificial Potentials for Online Safe Navigation. Paternain, S., +, TAC May 2020 1985-2000

Model reference adaptive control systems

A Partial-State Feedback Model Reference Adaptive Control Scheme. *Song*, *G.*, +, *TAC Jan. 2020 44-57*

Adaptive Control for a Class of Multi-Input Multi-Output Plants With Arbitrary Relative Degree. *Qu, Z.*, +, *TAC July 2020 3023-3038*

Molecular biophysics

- Adaptation Mechanisms in Phosphorylation Cycles By Allosteric Binding and Gene Autoregulation. Fang, Z., +, TAC Aug. 2020 3457-3470
- Fundamental Limits and Tradeoffs in Autocatalytic Pathways. *Siami, M.*, +, *TAC Feb. 2020 733-740*

Molecular configurations

Adaptation Mechanisms in Phosphorylation Cycles By Allosteric Binding and Gene Autoregulation. Fang, Z., +, TAC Aug. 2020 3457-3470

Monte Carlo methods

- Analytic Sensor Rules for Optimal Distributed Decision Given K-Out-of-L Fusion Rule Under Monte Carlo Approximation. Liao, Y, +, TAC Dec. 2020 5488-5495
- On the Stability of Unverified Transactions in a DAG-Based Distributed Ledger. *Ferraro*, P., +, *TAC Sept. 2020 3772-3783*
- Renewal Monte Carlo: Renewal Theory-Based Reinforcement Learning. Subramanian, J., +, TAC Aug. 2020 3663-3670

Motion control

- A New Method for Control Allocation of Aircraft Flight Control System. Yang, Y., +, TAC April 2020 1413-1428
- An Integrative Perspective to LQ and ℓ_{∞} Control for Delayed and Quantized Systems. *Nakahira, Y.*, +, *TAC Nov. 2020 4781-4792*
- Distributed Leader–Follower Affine Formation Maneuver Control for High-Order Multiagent Systems. *Chen, L., +, TAC Nov. 2020 4941-4948*
- Trajectory-Constrained Collective Circular Motion With Different Phase Arrangements. Jain, A., +, TAC May 2020 2237-2244

Multi-agent systems

- A Common Framework for Complete and Incomplete Attitude Synchronization in Networks With Switching Topology. *Pereira*, *P.O.*, +, *TAC Jan.* 2020 271-278
- A Proximal Diffusion Strategy for Multiagent Optimization With Sparse Affine Constraints. *Alghunaim, S.A.*, +, *TAC Nov. 2020 4554-4567*
- A Suboptimality Approach to Distributed Linear Quadratic Optimal Control. *Jiao, J.*, +, *TAC March 2020 1218-1225*
- Analyzing Controllability of Bilinear Systems on Symmetric Groups: Mapping Lie Brackets to Permutations. *Zhang, W.*, +, *TAC Nov. 2020 4895-4901*
- Asymptotic Behavior and Collision Avoidance in the Cucker–Smale Model. *Yin, X.*, +, *TAC July 2020 3112-3119*
- Average Consensus by Graph Filtering: New Approach, Explicit Convergence Rate, and Optimal Design. Yi, J., +, TAC Jan. 2020 191-206
- Collective Stochastic Discrete Choice Problems: A Min-LQG Dynamic Game Formulation. Salhab, R., +, TAC Aug. 2020 3302-3316
- Completely Decentralized Design of Distributed Observer for Linear Systems. *Kim, T.*, +, *TAC Nov. 2020 4664-4678*
- Consensus and Disagreement of Heterogeneous Belief Systems in Influence Networks. Ye, M., +, TAC Nov. 2020 4679-4694
- Consensus of Linear Multiagent Systems With Distributed Infinite Transmission Delays: A Low Gain Approach. Xu, X., +, TAC Feb. 2020 809-816
- Consensus of Multi-Agent Systems Under Binary-Valued Measurements and Recursive Projection Algorithm. *Wang, T.*, +, *TAC June 2020 2678-2685*
- Continuous-Time Integral Dynamics for a Class of Aggregative Games With Coupling Constraints. De Persis, C., +, TAC May 2020 2171-2176
- Cooperative Data-Driven Distributionally Robust Optimization. *Cherukuri, A.*, +, *TAC Oct. 2020 4400-4407*
- Deep Teams: Decentralized Decision Making With Finite and Infinite Number of Agents. *Arabneydi*, J., +, *TAC Oct. 2020 4230-4245*
- Delayed and Switched Control of Formations on a Line Segment: Delays and Switches Do Not Matter. *Aleksandrov, A.*, +, *TAC Feb. 2020 794-800*
- Distributed Consensus Observer for Multiagent Systems With High-Order Integrator Dynamics. Zuo, Z., +, TAC April 2020 1771-1778
- Distributed Consensus Over Markovian Packet Loss Channels. Xu, L., +, TAC Jan. 2020 279-286
- Distributed Coupled Multiagent Stochastic Optimization. Alghunaim, S.A., +, TAC Jan. 2020 175-190
- Distributed Event-Triggered Gradient Method for Constrained Convex Minimization. Liu, C., +, TAC Feb. 2020 778-785
- Distributed Finite-Time Optimization for Integrator Chain Multiagent Systems With Disturbances. *Wang, X.*, +, *TAC Dec. 2020 5296-5311*
- Distributed Kalman Filters With State Equality Constraints: Time-Based and Event-Triggered Communications. *He, X.*, +, *TAC Jan. 2020 28-43*

- Distributed Leader–Follower Affine Formation Maneuver Control for High-Order Multiagent Systems. *Chen, L., +, TAC Nov. 2020 4941-4948*
- Distributed Mechanism Design With Learning Guarantees for Private and Public Goods Problems. *Sinha, A.,* +, *TAC Oct. 2020 4106-4121*
- Distributed Mixed-Integer Linear Programming via Cut Generation and Constraint Exchange. *Testa, A., +, TAC April 2020 1456-1467*
- Distributed Multiagent Convex Optimization Over Random Digraphs. Alaviani, S.S., +, TAC March 2020 986-998
- Distributed Optimal Coordination for Heterogeneous Linear Multiagent Systems With Event-Triggered Mechanisms. *Li*, *Z.*, +, *TAC April 2020* 1763-1770
- Distributed Time-Varying Convex Optimization for a Class of Nonlinear Multiagent Systems. *Huang, B.,* +, *TAC Feb. 2020 801-808*
- Event-Triggered Bipartite Consensus for Multiagent Systems: A Zeno-Free Analysis. Yu, H., +, TAC Nov. 2020 4866-4873
- Event-Triggered Control for Semiglobal Robust Consensus of a Class of Nonlinear Uncertain Multiagent Systems. *Meng, H., +, TAC April 2020 1683-1690*
- Finite-Time Distributed Linear Equation Solver for Solutions With Minimum *l*₁-Norm. *Zhou, J.*, +, *TAC April 2020 1691-1696*
- Finite-Time Guarantees for Byzantine-Resilient Distributed State Estimation With Noisy Measurements. Su, L., +, TAC Sept. 2020 3758-3771
- Fixed-Time Leader-Following Consensus for High-Order Time-Varying Nonlinear Multiagent Systems. You, X., +, TAC Dec. 2020 5510-5516
- Heterogeneous Hegselmann–Krause Dynamics With Environment and Communication Noise. Chen, G., +, TAC Aug. 2020 3409-3424
- Interval Consensus for Multiagent Networks. Fontan, A., +, TAC May 2020 1855-1869
- Leader-Following Consensus for Linear Multiagent Systems via Asynchronous Sampled-Data Control. Liu, W., +, TAC July 2020 3215-3222
- Leaderless Synchronization of Heterogeneous Oscillators by Adaptively Learning the Group Model. *Baldi, S.*, +, *TAC Jan. 2020 412-418*
- Learning-Based Event-Triggered Control for Synchronization of Passive Multiagent Systems Under Attack. *Rahnama*, A., +, *TAC Oct. 2020 4170-4185*
- Minimum-Energy Distributed Consensus Control of Multiagent Systems: A Network Approximation Approach. *Chen, F., +, TAC March 2020 1144-1159*
- Multiagent Flocking With Angle-Based Formation Shape Control. Jing, G., +, TAC Feb. 2020 817-823
- Novel Stealthy Attack and Defense Strategies for Networked Control Systems. Mao, Y., +, TAC Sept. 2020 3847-3862
- Online Distributed Optimization With Strongly Pseudoconvex-Sum Cost Functions. Lu, K., +, TAC Jan. 2020 426-433
- Pointing Consensus and Bearing-Based Solutions to the Fermat–Weber Location Problem. *Trinh, M.H.*, +, *TAC June 2020 2339-2354*
- Positivity-Preserving Consensus of Homogeneous Multiagent Systems. *Liu*, *J.J.R.*, +, *TAC June 2020 2724-2729*
- Quaternion-Valued Distributed Filtering and Control. Talebi, S.P., +, TAC Oct. 2020 4246-4257
- Randomized Gradient-Free Distributed Optimization Methods for a Multiagent System With Unknown Cost Function. *Pang, Y.*, +, *TAC Jan. 2020* 333-340
- Resilient Distributed Optimization Algorithm Against Adversarial Attacks. *Zhao, C., +, TAC Oct. 2020 4308-4315*
- Resilient Leader-Follower Consensus to Arbitrary Reference Values in Time-Varying Graphs. Usevitch, J., +, TAC April 2020 1755-1762
- Resilient Output Containment of Heterogeneous Cooperative and Adversarial Multigroup Systems. Zuo, S., +, TAC July 2020 3104-3111
- Scalable, Distributed Algorithms for Solving Linear Equations via Double-Layered Networks. *Wang, X.*, +, *TAC March 2020 1132-1143*
- Scheduling Multiple Agents in a Persistent Monitoring Task Using Reachability Analysis. Yu, X., +, TAC April 2020 1499-1513
- Secure State Estimation for Multiagent Systems With Faulty and Malicious Agents. Lu, A., +, TAC Aug. 2020 3471-3485

- Solutions for Multiagent Pursuit-Evasion Games on Communication Graphs: Finite-Time Capture and Asymptotic Behaviors. *Lopez, V.G.*, +, *TAC May 2020 1911-1923*
- Stochastic Semistability for Nonlinear Dynamical Systems With Application to Consensus on Networks With Communication Uncertainty. *Haddad, W.M.*, +, *TAC July 2020 2826-2841*
- Symmetry Reduction in Optimal Control of Multiagent Systems on Lie Groups. Colombo, L.J., +, TAC Nov. 2020 4973-4980
- Utility Design for Distributed Resource Allocation—Part I: Characterizing and Optimizing the Exact Price of Anarchy. *Paccagnan, D.*, +, *TAC Nov.* 2020 4616-4631
- Whittle Index Policy for Dynamic Multichannel Allocation in Remote State Estimation. *Wang, J.*, +, *TAC Feb. 2020 591-603*

Multi-robot systems

- A Common Framework for Complete and Incomplete Attitude Synchronization in Networks With Switching Topology. *Pereira*, *P.O.*, +, *TAC Jan*. 2020 271-278
- Asymptotic Behavior and Collision Avoidance in the Cucker–Smale Model. *Yin, X.*, +, *TAC July 2020 3112-3119*
- Average Consensus by Graph Filtering: New Approach, Explicit Convergence Rate, and Optimal Design. Yi, J., +, TAC Jan. 2020 191-206
- Cascades-Based Leader–Follower Formation Tracking and Stabilization of Multiple Nonholonomic Vehicles. *Maghenem, M.A.*, +, *TAC Aug. 2020* 3639-3646
- Decentralized Goal Assignment and Safe Trajectory Generation in Multirobot Networks via Multiple Lyapunov Functions. *Panagou, D.*, +, *TAC Aug. 2020 3365-3380*
- Distributed Leader–Follower Affine Formation Maneuver Control for High-Order Multiagent Systems. Chen, L., +, TAC Nov. 2020 4941-4948
- Leader-Following Attitude Consensus of Multiple Rigid Spacecraft Systems Under Switching Networks. Lu, M., +, TAC Feb. 2020 839-845
- Leader-Following Consensus for a Class of Multiple Robot Manipulators over Switching Networks by Distributed Position Feedback Control. *He*, *C.*, +, *TAC Feb. 2020 890-896*
- Limit-Cycle-Based Design of Formation Control for Mobile Agents. *Wang*, C., +, *TAC Aug. 2020 3530-3543*
- Minimum-Energy Distributed Consensus Control of Multiagent Systems: A Network Approximation Approach. Chen, F., +, TAC March 2020 1144-1159
- Multiagent Flocking With Angle-Based Formation Shape Control. Jing, G., +, TAC Feb. 2020 817-823
- Ratio-of-Distance Rigidity Theory With Application to Similar Formation Control. Cao, K., +, TAC June 2020 2598-2611
- Resilient Leader-Follower Consensus to Arbitrary Reference Values in Time-Varying Graphs. Usevitch, J., +, TAC April 2020 1755-1762
- Resilient Output Containment of Heterogeneous Cooperative and Adversarial Multigroup Systems. Zuo, S., +, TAC July 2020 3104-3111
- Robust Cooperative Output Regulation of Heterogeneous Uncertain Linear Multiagent Systems With Time-Varying Communication Topologies. *Wang, L.*, +, *TAC Oct. 2020 4340-4347*
- Symmetry Reduction in Optimal Control of Multiagent Systems on Lie Groups. Colombo, L.J., +, TAC Nov. 2020 4973-4980
- Trajectory-Constrained Collective Circular Motion With Different Phase Arrangements. Jain, A., +, TAC May 2020 2237-2244

Multidimensional systems

- Graphon Control of Large-Scale Networks of Linear Systems. Gao, S., +, TAC Oct. 2020 4090-4105
- Output Feedback Stabilization for a Class of First-Order Equation Setting of Collocated Well-Posed Linear Systems With Time Delay in Observation. *Guo, B.*, +, *TAC June 2020 2612-2618*
- Reduced Order Controller Design for Robust Output Regulation. *Paunonen*, L., +, *TAC June 2020 2480-2493*
- Stability Analysis of Dissipative Systems Subject to Nonlinear Damping via Lyapunov Techniques. Marx, S., +, TAC May 2020 2139-2146
- Stochastic Control of Multidimensional Systems With Relative Optimization. Cao, X., TAC May 2020 1886-1900

The Time-Invariant Multidimensional Gaussian Sequential Rate-Distortion Problem Revisited. *Stavrou, P.A.*, +,

TAC May 2020 2245-2249

Well-Posedness of Boundary Controlled and Observed Stochastic Port-Hamiltonian Systems. *Lamoline, F.*, +, *TAC Oct. 2020 4258-4264*

Multivariable control systems

- "Class-Type" Identification-Based Internal Models in Multivariable Nonlinear Output Regulation. *Bin, M.*, +, *TAC Oct. 2020 4369-4376*
- Analysis and Design of Continuous-Time Multivariable Periodic Controllers: An \mathcal{H}_{∞} /LTR-Based Approach. Deshmukh, A., +, TAC Aug. 2020 3608-3615
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*
- Performance Recovery of Dynamic Feedback-Linearization Methods for Multivariable Nonlinear Systems. Wu, Y., +, TAC April 2020 1365-1380

Ν

Nash equilibrium

A Game-Theoretic Approach for Dynamic Information Flow Tracking to Detect Multistage Advanced Persistent Threats. *Moothedath, S.*, +, *TAC Dec. 2020 5248-5263*

Navigation

Stochastic Artificial Potentials for Online Safe Navigation. *Paternain, S.*, +, *TAC May 2020 1985-2000*

Network coding

State-Secrecy Codes for Networked Linear Systems. *Tsiamis, A.*, +, *TAC May 2020 2001-2015*

Network intrusion detection

Guest Editorial: Special Issue on Security and Privacy of Distributed Algorithms and Network Systems. *Chen, Z.*, +, *TAC Sept. 2020 3725-3727*

Network security

Guest Editorial: Special Issue on Security and Privacy of Distributed Algorithms and Network Systems. *Chen*, Z., +, *TAC Sept. 2020 3725-3727*

Network systems

*H*₂ Model Reduction of Linear Network Systems by Moment Matching and Optimization. *Necoara, I.*, +, *TAC Dec. 2020 5328-5335*

Network theory (graphs)

- Asymptotic Behavior of Conjunctive Boolean Networks Over Weakly Connected Digraphs. Chen, X., +, TAC June 2020 2536-2549
- Asymptotical Stability of Probabilistic Boolean Networks With State Delays. Zhu, S., +, TAC April 2020 1779-1784
- Average Consensus by Graph Filtering: New Approach, Explicit Convergence Rate, and Optimal Design. *Yi*, *J.*, +, *TAC Jan. 2020 191-206*
- Causality and Network Graph in General Bilinear State-Space Representations. Jozsa, M., +, TAC Aug. 2020 3623-3630
- Completely Decentralized Design of Distributed Observer for Linear Systems. *Kim, T.*, +, *TAC Nov. 2020 4664-4678*
- Consensus and Disagreement of Heterogeneous Belief Systems in Influence Networks. Ye, M., +, TAC Nov. 2020 4679-4694
- Decentralized Optimization Over Time-Varying Directed Graphs With Row and Column-Stochastic Matrices. *Saadatniaki, F.,* +, *TAC Nov. 2020 4769-4780*
- Event-Triggered Bipartite Consensus for Multiagent Systems: A Zeno-Free Analysis. Yu, H., +, TAC Nov. 2020 4866-4873
- Extended Structural Balance Theory and Method for Cooperative–Antagonistic Networks. *Meng*, D., +, *TAC May 2020 2147-2154*
- Interval Consensus for Multiagent Networks. Fontan, A., +, TAC May 2020 1855-1869
- Minimum-Energy Distributed Consensus Control of Multiagent Systems: A Network Approximation Approach. *Chen, F., +, TAC March 2020 1144-1159*
- Resilient Distributed Optimization Algorithm Against Adversarial Attacks. *Zhao, C., +, TAC Oct. 2020 4308-4315*
- Robustness of Interdependent Cyber-Physical Systems Against Cascading Failures. Zhang, Y., +, TAC Feb. 2020 711-726
- Structural Controllability of Networks With Dynamical Structured Nodes. Commault, C., TAC June 2020 2736-2742

Network topology

- *H*₂ Model Reduction of Linear Network Systems by Moment Matching and Optimization. *Necoara*, *I.*, +, *TAC Dec. 2020 5328-5335*
- On Synchronization of Dynamical Systems Over Directed Switching Topologies: An Algebraic and Geometric Perspective. *Qin, J.*, +, *TAC Dec. 2020* 5083-5098
- Synchronization of Kuramoto Oscillators: A Regional Stability Framework. *Zhu, L.*, +, *TAC Dec. 2020 5070-5082*
- Networked control systems
 - A Distributed Framework fork-hop Control Strategies in Large-Scale Networks Based on Local Interactions. *Gasparri, A.*, +, *TAC May 2020 1825-1840*
 - Analysis of Two-Dimensional Feedback Systems Over Networks Using Dissipativity. Yan, Y., +, TAC Aug. 2020 3241-3255
 - Dissipativity Properties of Nonlinear Systems Under Network Constraints. Ghodrat, M., +, TAC June 2020 2708-2715
 - Energy-Efficient Time-Triggered Communication Policies for Wireless Networked Control Systems. Varma, V.S., +, TAC Oct. 2020 4324-4331
 - Event-Triggered H_∞ Control of Networked Control Systems With Distributed Transmission Delay. Yan, S., +, TAC Oct. 2020 4295-4301
 - Finite-Time Stability of Network Systems With Discontinuous Dynamics Over Signed Digraphs. Shi, X., +, TAC Nov. 2020 4874-4881
 - Integral Input-to-State Stability of Networked Control Systems. Noroozi, N., +, TAC March 2020 1203-1210
 - MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels. *Cai, S., +, TAC May 2020 2046-2061*
 - Novel Stealthy Attack and Defense Strategies for Networked Control Systems. Mao, Y., +, TAC Sept. 2020 3847-3862
 - Observer Design for Nonlinear Networked Control Systems With Persistently Exciting Protocols. *Maass, A.I., +, TAC July 2020 2992-3006*
 - On the Positive Effect of Delay on the Rate of Convergence of a Class of Linear Time-Delayed Systems. *Moradian, H.,* +, *TAC Nov. 2020 4832-4839*
 - Periodic Event-Triggered Control for Nonlinear Networked Control Systems. Wang, W., +, TAC Feb. 2020 620-635
 - Stabilization of Networked Control Systems Under DoS Attacks and Output Quantization. Wakaiki, M., +, TAC Aug. 2020 3560-3575
 - Stabilization of Two-Port Networked Systems With Simultaneous Uncertainties in Plant, Controller, and Communication Channels. *Zhao, D.*, +, *TAC March 2020 1160-1175*
 - Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks. *Peng, C.*, +, *TAC Sept. 2020* 3943-3949
 - Synthesizing Communication Plans for Reachability and Safety Specifications. Hashimoto, K., +, TAC Feb. 2020 561-576
 - The Value of Timing Information in Event-Triggered Control. *Khojasteh*, *M.J.*, +, *TAC March 2020 925-940*
 - Tracking Control of Nonlinear Networked and Quantized Control Systems With Communication Delays. *Ren, W.*, +, *TAC Aug. 2020 3685-3692*

Neurocontrollers

- Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty. *Zheng, X.*, +, *TAC March 2020 1310-1317*
- Realization of Reachability for the Control of a Class of Nonlinear Systems. Chai, Y., +, TAC March 2020 1073-1088

Newton method

- A Fast Distributed Asynchronous Newton-Based Optimization Algorithm. Mansoori, F., +, TAC July 2020 2769-2784
- A Proof on Equivalence of Stagewise Newton and Dreyfus's Successive Approximation Procedures. *Mizutani, E., TAC June 2020 2716-2723*
- Distributed Second-Order Methods With Increasing Number of Working Nodes. Jerinkic, N.K., +, TAC Feb. 2020 846-853
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*

Riemannian Optimal Identification Method for Linear Systems With Symmetric Positive-Definite Matrix. Sato, K., +, TAC Nov. 2020 4493-4508

Noise

Heterogeneous Hegselmann–Krause Dynamics With Environment and Communication Noise. Chen, G., +, TAC Aug. 2020 3409-3424

Nonequilibrium thermodynamics

Stochastic Control and Nonequilibrium Thermodynamics: Fundamental Limits. Chen, Y, +, TAC July 2020 2979-2991

Nonlinear codes

Stabilization of Nonlinear Dynamic Systems Over Limited Capacity Communication Channels. *Sanjaroon, V.*, +, *TAC Aug. 2020 3655-3662*

Nonlinear control systems

- "Class-Type" Identification-Based Internal Models in Multivariable Nonlinear Output Regulation. *Bin, M.*, +, *TAC Oct. 2020 4369-4376*
- A Complete Characterization of Integral Input-to-State Stability and Its Small-Gain Theorem for Stochastic Systems. *Ito, H., TAC July 2020 3039-3052*
- A Detector-Based Approach for the Constrained Quadratic Control of Discrete-Time Markovian Jump Linear Systems. Zabala, Y.A., +, TAC March 2020 1211-1217
- A Dynamic Feedback Framework for Control of Time-Delay Nonlinear Systems With Unstable Zero Dynamics. *Lin, W., +, TAC Aug. 2020 3317-3332*
- A Finite-Time Local Observer in the Original Coordinates for Nonlinear Control Systems. *Possieri, C.*, +, *TAC Nov. 2020 4808-4815*
- A New Approach for Event-Triggered Stabilization and Output Regulation of Nonlinear Systems. *Khan, G.D.,* +, *TAC Aug. 2020 3592-3599*
- A Nonlinear Model Predictive Control Framework Using Reference Generic Terminal Ingredients. *Kohler, J.*, +, *TAC Aug. 2020 3576-3583*
- A Reference Governor for Nonlinear Systems With Disturbance Inputs Based on Logarithmic Norms and Quadratic Programming. *Li*, *N.*, +, *TAC July 2020 3207-3214*
- A Set-Membership Approach to Event-Triggered Filtering for General Nonlinear Systems Over Sensor Networks. *Ding, D.*, +, *TAC April 2020 1792-1799*
- A Stabilization Framework for the Output Regulation of Rational Nonlinear Systems. *Castro, R.d.S.*, +, *TAC Nov. 2020 4860-4865*
- A Test for the Generic Strong Accessibility of Meromorphic Nonlinear Systems. Carravetta, F., +, TAC Feb. 2020 867-873
- Adaptive Event-Triggered Control of Nonlinear Systems With Controller and Parameter Estimator Triggering. *Huang, J.*, +, *TAC Jan. 2020 318-324*
- Adaptive Semiglobal Nonlinear Output Regulation: An Extended-State Observer Approach. *Wang, L.*, +, *TAC June 2020 2670-2677*
- Adding Integral Action for Open-Loop Exponentially Stable Semigroups and Application to Boundary Control of PDE Systems. *Terrand-Jeanne*, *A.*, +, *TAC Nov. 2020 4481-4492*
- ADRC Dynamic Stabilization of an Unstable Heat Equation. Zhang, Y, +, TAC Oct. 2020 4424-4429
- Almost Global Stability of Nonlinear Switched Systems With Time-Dependent Switching. Karabacak, O., +, TAC July 2020 2969-2978
- Almost Sure Stability of Nonlinear Systems Under Random and Impulsive Sequential Attacks. *He, W.*, +, *TAC Sept. 2020 3879-3886*
- An *H_i*/*H*_∞ Optimization Approach to Event-Triggered Fault Detection for Linear Discrete Time Systems. *Zhong, M.*, +, *TAC Oct. 2020 4464-4471*
- Analysis of Two-Dimensional Feedback Systems Over Networks Using Dissipativity. Yan, Y., +, TAC Aug. 2020 3241-3255
- Asymptotic Stability Analysis of Discrete-Time Switched Cascade Nonlinear Systems With Delays. *Liu*, *X.*, +, *TAC June 2020 2686-2692*
- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
- Combining Pontryagin's Principle and Dynamic Programming for Linear and Nonlinear Systems. Sassano, M., +, TAC Dec. 2020 5312-5327
- Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty. *Zheng, X*, +, *TAC March 2020 1310-1317*
- Continuous Control for Fully Damped Mechanical Systems With Input Constraints: Finite-Time and Exponential Tracking. Zamora-Gomez, G.I., +, TAC Feb. 2020 882-889
- Continuous-Time and Sampled-Data Stabilizers for Nonlinear Systems With Input and Measurement Delays. *Battilotti, S., TAC April 2020 1568-1583*

- Contraction Analysis of Monotone Systems via Separable Functions. *Kawano, Y., +, TAC Aug. 2020 3486-3501*
- Correction to the Paper "A Robust IDA-PBC Approach for Handling Uncertainties in Underactuated Mechanical Systems" [Oct 18 3495-3502]. Donaire, A., +, TAC July 2020 3223-3226
- Data-Driven Economic NMPC Using Reinforcement Learning. Gros, S., +, TAC Feb. 2020 636-648
- Data-Driven Model Reduction of Monotone Systems by Nonlinear DC Gains. Kawano, Y., +, TAC May 2020 2094-2106
- Delay-Tolerant Adaptive Robust Tracking Control of Uncertain Time-Delay Systems. Nandiganahalli, J.S., +, TAC Feb. 2020 695-710
- Detectability and Uniform Global Asymptotic Stability in Switched Nonlinear Time-Varying Systems. *Lee, T.*, +, *TAC May 2020 2123-2138*
- Discrete-Time Systems With Constrained Time Delays and Delay-Dependent Lyapunov Functions. *Pepe, P., TAC April 2020 1724-1730*
- Dissipativity Properties of Nonlinear Systems Under Network Constraints. Ghodrat, M., +, TAC June 2020 2708-2715
- Distributed Leader–Follower Affine Formation Maneuver Control for High-Order Multiagent Systems. Chen, L., +, TAC Nov. 2020 4941-4948
- Distributed Time-Varying Convex Optimization for a Class of Nonlinear Multiagent Systems. *Huang, B., +, TAC Feb. 2020 801-808*
- Disturbance Attenuation by Measurement Feedback in Nonlinear Systems via Immersion and Algebraic Conditions. *Mylvaganam, T.*, +, *TAC Feb.* 2020 854-860
- Dynamical Systems With a Cyclic Sign Variation Diminishing Property. Ben Avraham, T., +, TAC March 2020 941-954
- Event-Triggered Adaptive Control for a Class of Nonlinear Systems With Unknown Control Direction and Sensor Faults. *Wang, C.*, +, *TAC Feb.* 2020 763-770
- Event-Triggered Control for Semiglobal Robust Consensus of a Class of Nonlinear Uncertain Multiagent Systems. *Meng, H., +, TAC April 2020 1683-1690*
- Event-Triggered Global Finite-Time Control for a Class of Uncertain Nonlinear Systems. Zhang, C., +, TAC March 2020 1340-1347
- Event-Triggered Observer Design for Delayed Output-Sampled Systems. Song, C., +, TAC Nov. 2020 4824-4831
- Exponential Stabilization of Port-Hamiltonian Boundary Control Systems via Energy Shaping. Macchelli, A., +, TAC Oct. 2020 4440-4447
- Extremum Seeking Control With Input Dead-Zone. Shao, G., +, TAC July 2020 3184-3190
- Feedback Linearization Based on Gaussian Processes With Event-Triggered Online Learning. Umlauft, J., +, TAC Oct. 2020 4154-4169
- Finite-Time Sliding-Mode Control of Markovian Jump Cyber-Physical Systems Against Randomly Occurring Injection Attacks. Cao, Z., +, TAC March 2020 1264-1271
- Formulas for Data-Driven Control: Stabilization, Optimality, and Robustness. De Persis, C., +, TAC March 2020 909-924
- Global Sliding Mode Observers for Some Uncertain Mechanical Systems. *Apaza-Perez, W.A.*, +, *TAC March 2020 1348-1355*
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*
- Gradient Flow Algorithms for Density Propagation in Stochastic Systems. *Caluya, K.F.*, +, *TAC Oct. 2020 3991-4004*
- Guaranteeing Global Asymptotic Stability and Prescribed Transient and Steady-State Attributes via Uniting Control. *Kanakis, G.S.*, +, *TAC May* 2020 1956-1968
- Higher Order Sliding Mode Control Using Discontinuous Integral Action. Cruz-Zavala, E., +, TAC Oct. 2020 4316-4323
- Input-to-State Stability of Time-Delay Systems With Delay-Dependent Impulses. Liu, X., +, TAC April 2020 1676-1682
- Integral Control of Stable Negative-Imaginary Systems Preceded by Hysteresis Nonlinearity. *Dey, A.*, +, *TAC March 2020 1333-1339*
- Integral Input-to-State Stability of Networked Control Systems. Noroozi, N., +, TAC March 2020 1203-1210
- Interval Consensus for Multiagent Networks. Fontan, A., +, TAC May 2020 1855-1869

- Lebesgue-Approximation Model Predictive Control of Nonlinear Sampled-Data Systems. *Tao, J.*, +, *TAC Oct. 2020 4047-4060*
- Local Controllability of Single-Input Nonlinear Systems Based on Deterministic Wiener Processes. *Nishimura, Y.*, +, *TAC Jan. 2020 354-360*
- Logic-Based Switching Control for Stabilization of Stochastic Feedforward Nonlinear Systems. Yu, M., TAC Oct. 2020 4408-4415
- Lyapunov Event-Triggered Stabilization With a Known Convergence Rate. *Proskurnikov, A.V.,* +, *TAC Feb. 2020 507-521*
- Lyapunov Stability for Impulsive Systems via Event-Triggered Impulsive Control. Li, X., +, TAC Nov. 2020 4908-4913
- Matched Disturbance Rejection for a Class of Nonlinear Systems. *Ferguson, J., +, TAC April 2020 1710-1715*
- Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints. *Zhu, Y*, +, *TAC May 2020 2177-2184*
- Nonanticipating Lyapunov Functions for Persistently Excited Nonlinear Systems. Verrelli, C.M., +, TAC June 2020 2634-2639
- Nonlinearity Estimator-Based Control of A Class of Uncertain Nonlinear Systems. Yang, J., +, TAC May 2020 2230-2236
- Observer Design for Nonlinear Networked Control Systems With Persistently Exciting Protocols. *Maass, A.I., +, TAC July 2020 2992-3006*
- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y.*, +, *TAC Aug. 2020 3714-3721*
- On Event-Triggered Control of Nonlinear Stochastic Systems. Luo, S., +, TAC Jan. 2020 369-375
- On the Event-Triggered Controller Design. *Ghodrat, M.*, +, *TAC Oct. 2020* 4122-4137
- Optimality and Passivity of Input-Quadratic Nonlinear Systems. Sassano, M., +, TAC Aug. 2020 3229-3240
- Orbital Stability Analysis for Perturbed Nonlinear Systems and Natural Entrainment via Adaptive Andronov–Hopf Oscillator. Zhao, J., +, TAC Jan. 2020 87-101
- Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498
- Performance Output Tracking for Multidimensional Heat Equation Subject to Unmatched Disturbance and Noncollocated Control. *Zhou, H.*, +, *TAC May 2020 1940-1955*
- Periodic Event-Triggered Control for Nonlinear Networked Control Systems. Wang, W., +, TAC Feb. 2020 620-635
- Preserving and Achieving Passivity-Short Property Through Discretization. Joo, Y., +, TAC Oct. 2020 4265-4272
- Quantized Nonstationary Filtering of Networked Markov Switching RSNSs: A Multiple Hierarchical Structure Strategy. *Cheng, J.*, +, *TAC Nov. 2020* 4816-4823
- RBFNN-Based Minimum Entropy Filtering for a Class of Stochastic Nonlinear Systems. Yin, X., +, TAC Jan. 2020 376-381
- Realization of Reachability for the Control of a Class of Nonlinear Systems. *Chai, Y., +, TAC March 2020 1073-1088*
- Reduced Order Controller Design for Robust Output Regulation. *Paunonen*, L., +, *TAC June 2020 2480-2493*
- Reduced-Order Observer Design for Switched Descriptor Systems With Unknown Inputs. Zhang, J., +, TAC Jan. 2020 287-294
- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, *D.*, +, *TAC May 2020 2300-2307*
- Remarks on "Consistent Abstractions of Affine Control Systems". Xia, Q., TAC Oct. 2020 4430-4433
- Removing SPR-Like Conditions in Adaptive Feedforward Control of Uncertain Systems. *Wang, Y.*, +, *TAC June 2020 2309-2324*
- Self-Learning Optimal Regulation for Discrete-Time Nonlinear Systems Under Event-Driven Formulation. *Wang, D.*, +, *TAC March 2020 1272-1279*
- Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes. Zhang, C., +, TAC May 2020 2185-2191

- Sensitivity-Based Warmstarting for Nonlinear Model Predictive Control With Polyhedral State and Control Constraints. *Liao-McPherson*, D., +, *TAC Oct. 2020 4288-4294*
- Singularities and Moments of Nonlinear Systems. Padoan, A., +, TAC Aug. 2020 3647-3654
- Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. *Qi*, *W*, +, *TAC Jan. 2020 361-368*
- Solutions for Multiagent Pursuit-Evasion Games on Communication Graphs: Finite-Time Capture and Asymptotic Behaviors. *Lopez, V.G.*, +, *TAC May 2020 1911-1923*
- Stability Analysis of Linear Partial Differential Equations With Generalized Energy Functions. *Gahlawat*, A., +, TAC May 2020 1924-1939
- Stabilization of a Class of Nonlinear Systems With Random Disturbance via Intermittent Stochastic Noise. *Zhang, B., +, TAC March 2020 1318-1324*
- Stabilization of Highly Nonlinear Hybrid Systems by Feedback Control Based on Discrete-Time State Observations. *Fei, C.*, +, *TAC July 2020* 2899-2912
- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984
- Stabilization of Switched Linear Systems Subject to Actuator Saturation via Invariant Semiellipsoids. *Lian, J.*, +, *TAC Oct. 2020 4332-4339*
- State-Constrained Nonlinear L₂-Gain Control. Wu, J., +, TAC Feb. 2020 771-777
- Switched Systems With Multiple Equilibria Under Disturbances: Boundedness and Practical Stability. Veer, S., +, TAC June 2020 2371-2386
- Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks. *Peng, C.*, +, *TAC Sept. 2020* 3943-3949
- Synthesizing Communication Plans for Reachability and Safety Specifications. Hashimoto, K., +, TAC Feb. 2020 561-576
- Toward a Comprehensive Impossibility Result for String Stability. Farnam, A., +, TAC April 2020 1652-1659
- Tracking Control of Nonlinear Networked and Quantized Control Systems With Communication Delays. *Ren, W.*, +, *TAC Aug. 2020 3685-3692*
- Trajectory-Constrained Collective Circular Motion With Different Phase Arrangements. Jain, A., +, TAC May 2020 2237-2244
- Uniting Observers. Astolfi, D., +, TAC July 2020 2867-2882
- When Is a Nonlinear System Semiglobally Asymptotically Stabilizable by Digital Feedback?. *Lin, W., TAC Nov. 2020 4584-4599*

Nonlinear differential equations

- Algorithm to Compute Nonlinear Partial Observer Normal Form With Multiple Outputs. Saadi, W., +, TAC June 2020 2700-2707
- An LMI Approach to Stability Analysis of Coupled Parabolic Systems. Wakaiki, M., TAC Jan. 2020 404-411
- Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498
- Output Feedback Stabilization for a Class of First-Order Equation Setting of Collocated Well-Posed Linear Systems With Time Delay in Observation. *Guo, B.*, +, *TAC June 2020 2612-2618*
- Singular Perturbation Analysis of a Coupled System Involving the Wave Equation. Cerpa, E., +, TAC Nov. 2020 4846-4853
- Stability Analysis of Linear Partial Differential Equations With Generalized Energy Functions. *Gahlawat*, A., +, *TAC May 2020 1924-1939*

Nonlinear dynamical systems

- A Globally Stable Algorithm for the Integration of High-Index Differential-Algebraic Systems. *Franco*, *P.D.*, +, *TAC May 2020 2107-2122*
- Algorithm to Compute Nonlinear Partial Observer Normal Form With Multiple Outputs. Saadi, W., +, TAC June 2020 2700-2707
- Asymptotic Behavior and Collision Avoidance in the Cucker–Smale Model. *Yin, X.*, +, *TAC July 2020 3112-3119*
- Dynamical Systems With a Cyclic Sign Variation Diminishing Property. Ben Avraham, T., +, TAC March 2020 941-954
- Event-Triggered Discrete-Time Cubature Kalman Filter for Nonlinear Dynamical Systems With Packet Dropout. *Kooshkbaghi, M.*, +, *TAC May* 2020 2278-2285

- Fixed-Time Leader-Following Consensus for High-Order Time-Varying Nonlinear Multiagent Systems. You, X., +, TAC Dec. 2020 5510-5516
- Koopman-Based Lifting Techniques for Nonlinear Systems Identification. Mauroy, A., +, TAC June 2020 2550-2565
- On Robust Parameter Estimation in Finite-Time Without Persistence of Excitation. Wang, J., +, TAC April 2020 1731-1738
- Optimal Construction of Koopman Eigenfunctions for Prediction and Control. *Korda, M.*, +, *TAC Dec. 2020 5114-5129*
- Orbital Stability Analysis for Perturbed Nonlinear Systems and Natural Entrainment via Adaptive Andronov–Hopf Oscillator. *Zhao, J.*, +, *TAC Jan. 2020 87-101*
- Quadratic Optimal Control of Linear Complementarity Systems: First-Order Necessary Conditions and Numerical Analysis. *Vieira, A.*, +, *TAC June* 2020 2743-2750
- Semiexplicit Solutions to Some Nonlinear Nonquadratic Mean-Field-Type Games: A Direct Method. *Barreiro-Gomez, J.*, +, *TAC June 2020 2582-*2597
- Stabilization of Nonlinear Dynamic Systems Over Limited Capacity Communication Channels. Sanjaroon, V., +, TAC Aug. 2020 3655-3662
- Stochastic Semistability for Nonlinear Dynamical Systems With Application to Consensus on Networks With Communication Uncertainty. *Haddad*, *W.M.*, +, *TAC July 2020 2826-2841*

Strong Structural Controllability of Systems on Colored Graphs. Jia, J., +, TAC Oct. 2020 3977-3990

Nonlinear equations

Stability Theory of Stochastic Models in Opinion Dynamics. Askarzadeh, Z., +, TAC Feb. 2020 522-533

- Nonlinear filters
 - Extended Kalman Filtering With Nonlinear Equality Constraints: A Geometric Approach. *Barrau, A.*, +, *TAC June 2020 2325-2338*
 - Nonlinear Filtering Method Using a Switching Error Model for Outlier-Contaminated Observations. Nakabayashi, A., +, TAC July 2020 3150-3156
 - Proper Orthogonal Decomposition Method to Nonlinear Filtering Problems in Medium-High Dimension. *Wang*, Z., +, *TAC April 2020 1613-1624*
 - Protocol-Based Unscented Kalman Filtering in the Presence of Stochastic Uncertainties. *Liu, S.,* +, *TAC March 2020 1303-1309*
 - RBFNN-Based Minimum Entropy Filtering for a Class of Stochastic Nonlinear Systems. *Yin, X.*, +, *TAC Jan. 2020 376-381*

Nonlinear systems

- "Class-Type" Identification-Based Internal Models in Multivariable Nonlinear Output Regulation. *Bin, M.*, +, *TAC Oct. 2020 4369-4376*
- Accurate Uncertainty Propagation for Discrete-Time Nonlinear Systems Using Differential Inequalities With Model Redundancy. *Yang, X.*, +, *TAC Dec. 2020 5043-5057*
- Adaptive State-Feedback Stabilization of Stochastic High-Order Nonlinear Systems With Time-Varying Powers and Stochastic Inverse Dynamics. *Li*, *G.*, +, *TAC Dec. 2020 5360-5367*
- Event-Triggered Design With Guaranteed Minimum Interevent Times and \mathcal{L}_p Performance. *Ghodrat*, M., +, *TAC April 2020 1668-1675*
- Extending the Best Linear Approximation Framework to the Process Noise Case. Schoukens, M., +, TAC April 2020 1514-1524
- Nonlinearity Estimator-Based Control of A Class of Uncertain Nonlinear Systems. *Yang, J.*, +, *TAC May 2020 2230-2236*
- Observer Design for Nonlinear Systems With Output Transformation. de Cossio, F.G., +, TAC Dec. 2020 5205-5219
- On Synchronization of Dynamical Systems Over Directed Switching Topologies: An Algebraic and Geometric Perspective. *Qin, J.*, +, *TAC Dec. 2020* 5083-5098
- On the Use of Supervised Clustering in Stochastic NMPC Design. *Alamir*, M., TAC Dec. 2020 5392-5398
- Output Admissible Sets and Reference Governors: Saturations Are Not Constraints!. Cotorruelo, A., +, TAC March 2020 1192-1196
- Output Feedback Approximation-Free Prescribed Performance Tracking Control for Uncertain MIMO Nonlinear Systems. *Dimanidis, I.S.*, +, *TAC Dec. 2020 5058-5069*
- Performance Recovery of Dynamic Feedback-Linearization Methods for Multivariable Nonlinear Systems. Wu, Y., +, TAC April 2020 1365-1380

Normal distribution

- On the Nonexistence of Event Triggers That Preserve Gaussian State in Presence of Packet-Drop. *Kung, E.,* +, *TAC Oct. 2020 4302-4307*
- Number theory
- Analysis of the Existence of Equilibrium Profiles in Nonisothermal Axial Dispersion Tubular Reactors. *Hastir, A.*, +, *TAC April 2020 1525-1536* Numerical analysis
 - Analysis of the Existence of Equilibrium Profiles in Nonisothermal Axial Dispersion Tubular Reactors. *Hastir, A.*, +, *TAC April 2020 1525-1536*
 - Event-Triggered Dynamic Output Feedback Control for Switched Systems With Frequent Asynchronism. *Fei, Z., +, TAC July 2020 3120-3127*
 - Feedforward Boundary Control for the Regulation of a Passive and Diffusive Scalar in Two-Dimensional Unsteady Flows. *Liu, W., TAC Nov. 2020* 4882-4886
 - Kernel-Based Simultaneous Parameter-State Estimation for Continuous-Time Systems. Li, P., +, TAC July 2020 3053-3059
 - Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401
 - Optimal Control of Endoatmospheric Launch Vehicle Systems: Geometric and Computational Issues. *Bonalli, R., +, TAC June 2020 2418-2433*
 - Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498
 - Quadratic Optimal Control of Linear Complementarity Systems: First-Order Necessary Conditions and Numerical Analysis. Vieira, A., +, TAC June 2020 2743-2750
 - Stabilization of a Class of Nonlinear Systems With Random Disturbance via Intermittent Stochastic Noise. Zhang, B., +, TAC March 2020 1318-1324

Numerical models

Set Membership Identification of Linear Systems With Guaranteed Simulation Accuracy. Lauricella, M., +, TAC Dec. 2020 5189-5204

Numerical simulation

- Learning Latent Variable Dynamic Graphical Models by Confidence Sets Selection. *Ciccone, V.*, +, *TAC Dec. 2020 5130-5143*
- Mean-Square Exponential Stability for Stochastic Control Systems With Discrete-Time State Feedbacks and Their Numerical Schemes in Simulation. *Liu*, *L.*, +, *TAC Dec. 2020 5384-5391*
- Synchronization of Kuramoto Oscillators: A Regional Stability Framework. Zhu, L., +, TAC Dec. 2020 5070-5082

Nyquist criterion

ADRC Dynamic Stabilization of an Unstable Heat Equation. Zhang, Y., +, TAC Oct. 2020 4424-4429

0

Object tracking

Unbiased FIR Filtering for Time-Stamped Discretely Delayed and Missing Data. Uribe-Murcia, K.J., +, TAC May 2020 2155-2162

- Observability
 - *H*₂ Model Reduction of Linear Network Systems by Moment Matching and Optimization. *Necoara, I.*, +, *TAC Dec. 2020 5328-5335*
 - A Finite-Time Local Observer in the Original Coordinates for Nonlinear Control Systems. *Possieri, C.*, +, *TAC Nov. 2020 4808-4815*
 - Analysis and Computation of the H_2 Norm of Delay Differential Algebraic Equations. *Gomez, M.A.*, +, *TAC May 2020 2192-2199*
 - Approximate Controllability and Approximate Observability of Singular Distributed Parameter Systems. *Ge*, *Z*., +, *TAC May 2020 2294-2299*
 - Critical Observability for Automata and Petri Nets. Masopust, T., TAC Jan. 2020 341-346
 - Design of Privacy-Preserving Dynamic Controllers. Kawano, Y., +, TAC Sept. 2020 3863-3878
 - Efficient Verification of Observability and Reconstructibility for Large Boolean Control Networks With Special Structures. *Zhang, K.*, +, *TAC Dec. 2020 5144-5158*
 - Linear Hybrid Systems With Periodic Jumps: A Notion of Strong Observability and Strong Detectability. *Rios, H., +, TAC June 2020 2640-2646*

New Gramians for Switched Linear Systems: Reachability, Observability, and Model Reduction. *Pontes Duff, I.*, +, *TAC June 2020 2526-2535*

- Relative Network Observability and Its Relation With Network Observability. Hou, Y, +, TAC Aug. 2020 3584-3591
- Secure State Estimation for Multiagent Systems With Faulty and Malicious Agents. Lu, A., +, TAC Aug. 2020 3471-3485
- Stability-Preserving Morse Normal Form. Kucera, V., TAC Dec. 2020 5099-5113
- Supervisor Localization of Timed Discrete-Event Systems Under Partial Observation. Zhang, R., +, TAC Jan. 2020 295-301
- Synthesis of Dynamic Masks for Infinite-Step Opacity. Yin, X., +, TAC April 2020 1429-1441
- When Is a Nonlinear System Semiglobally Asymptotically Stabilizable by Digital Feedback?. *Lin, W., TAC Nov. 2020 4584-4599*

Observers

- A Distributed Cyber-Attack Detection Scheme With Application to DC Microgrids. *Gallo, A.J.*, +, *TAC Sept. 2020 3800-3815*
- A Distributed Framework fork-hop Control Strategies in Large-Scale Networks Based on Local Interactions. *Gasparri, A.*, +, *TAC May 2020 1825-1840*
- A Finite-Time Local Observer in the Original Coordinates for Nonlinear Control Systems. *Possieri*, C., +, *TAC Nov. 2020 4808-4815*
- A New Varying-Gain-Exponent-Based Differentiator/Observer: An Efficient Balance Between Linear and Sliding-Mode Algorithms. *Ghanes, M.*, +, *TAC Dec. 2020 5407-5414*
- A Robust Asymptotic Observer for Systems That Converge to Unobservable States—A Batch Reactor Case Study. *Rapaport, A.*, +, *TAC June 2020* 2693-2699
- Adaptive Semiglobal Nonlinear Output Regulation: An Extended-State Observer Approach. *Wang, L.*, +, *TAC June 2020 2670-2677*
- Algorithm to Compute Nonlinear Partial Observer Normal Form With Multiple Outputs. Saadi, W., +, TAC June 2020 2700-2707
- An *H_i*/*H*_∞ Optimization Approach to Event-Triggered Fault Detection for Linear Discrete Time Systems. *Zhong, M.*, +, *TAC Oct. 2020 4464-4471*

Backstepping-Based Estimation of Thermoacoustic Oscillations in a Rijke Tube With Experimental Validation. *de Andrade, G.A.*, +, *TAC Dec. 2020* 5336-5343

- Completely Decentralized Design of Distributed Observer for Linear Systems. *Kim, T.*, +, *TAC Nov. 2020 4664-4678*
- Continuous Discrete Sequential Observers for Time-Varying Systems Under Sampling and Input Delays. *Mazenc, F.*, +, *TAC April 2020 1704-1709*
- Continuous Twisting Algorithm for Third-Order Systems. *Mendoza-Avila*, J., +, TAC July 2020 2814-2825
- Continuous-Time and Sampled-Data Stabilizers for Nonlinear Systems With Input and Measurement Delays. *Battilotti, S., TAC April 2020 1568-1583*
- Design Procedure for Linear Unknown Input Functional Observers. Sakhraoui, I., +, TAC Feb. 2020 831-838
- Distributed Consensus Observer for Multiagent Systems With High-Order Integrator Dynamics. Zuo, Z., +, TAC April 2020 1771-1778
- Distributed Optimal Coordination for Heterogeneous Linear Multiagent Systems With Event-Triggered Mechanisms. *Li*, *Z.*, +, *TAC April 2020* 1763-1770
- Event-Triggered Observer Design for Delayed Output-Sampled Systems. Song, C., +, TAC Nov. 2020 4824-4831
- Fixed-Time Leader-Following Consensus for High-Order Time-Varying Nonlinear Multiagent Systems. You, X., +, TAC Dec. 2020 5510-5516
- Fredholm Backstepping Control of Coupled Linear Parabolic PDEs With Input and Output Delays. *Deutscher*, J., +, *TAC July 2020 3128-3135*
- Fully Distributed Resilient State Estimation Based on Distributed Median Solver. *Lee, J.G.*, +, *TAC Sept. 2020 3935-3942*
- Global Sliding Mode Observers for Some Uncertain Mechanical Systems. *Apaza-Perez, W.A.*, +, *TAC March 2020 1348-1355*
- Hybrid Nonlinear Observers for Inertial Navigation Using Landmark Measurements. Wang, M., +, TAC Dec. 2020 5173-5188
- Kernel-Based Simultaneous Parameter-State Estimation for Continuous-Time Systems. Li, P., +, TAC July 2020 3053-3059
- Leader-Following Consensus for a Class of Multiple Robot Manipulators over Switching Networks by Distributed Position Feedback Control. *He*, *C.*, +, *TAC Feb. 2020 890-896*

Leaderless Synchronization of Heterogeneous Oscillators by Adaptively Learning the Group Model. *Baldi, S., +, TAC Jan. 2020 412-418*

- Linear Hybrid Systems With Periodic Jumps: A Notion of Strong Observability and Strong Detectability. *Rios, H., +, TAC June 2020 2640-2646*
- Notions of Centralized and Decentralized Opacity in Linear Systems. Ramasubramanian, B., +, TAC April 2020 1442-1455
- Observed-Mode-Dependent State Estimation of Hidden Semi-Markov Jump Linear Systems. Cai, B., +, TAC Jan. 2020 442-449
- Observer Design For a Class of Parabolic Systems With Large Delays and Sampled Measurements. *Ahmed-Ali*, *T.*, +, *TAC May 2020 2200-2206*
- Observer Design for Nonlinear Networked Control Systems With Persistently Exciting Protocols. *Maass, A.I., +, TAC July 2020 2992-3006*
- Observer Design for Nonlinear Systems With Output Transformation. de Cossio, F.G., +, TAC Dec. 2020 5205-5219
- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y.*, +, *TAC Aug. 2020 3714-3721*
- Observer-Based Robust Controller Design With Simultaneous Optimization of Scaling Matrices. Sato, M., TAC Feb. 2020 861-866
- Observers and Disturbance Rejection Control for a Heat Equation. *Feng, H.*, +, *TAC Nov. 2020 4957-4964*
- On the Event-Triggered Controller Design. Ghodrat, M., +, TAC Oct. 2020 4122-4137
- On the Existence and Design of Functional Observers. Darouach, M., +, TAC June 2020 2751-2759
- On Unknown Input Observers of Linear Systems: Asymptotic Unknown Input Decoupling Approach. Ichalal, D., +, TAC March 2020 1197-1202
- Opacity Enforcement for Confidential Robust Control in Linear Cyber-Physical Systems. An, L., +, TAC March 2020 1234-1241
- Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498
- Output Feedback Stabilization for a Class of First-Order Equation Setting of Collocated Well-Posed Linear Systems With Time Delay in Observation. *Guo, B., +, TAC June 2020 2612-2618*
- Peaking Attenuation of High-Gain Observers Using Adaptive Techniques: State Estimation and Feedback Control. *Shakarami, M.*, +, *TAC Oct. 2020* 4215-4229
- Performance Output Tracking for Multidimensional Heat Equation Subject to Unmatched Disturbance and Noncollocated Control. *Zhou, H.*, +, *TAC May 2020 1940-1955*
- Performance Recovery of Dynamic Feedback-Linearization Methods for Multivariable Nonlinear Systems. *Wu*, *Y*, +, *TAC April 2020 1365-1380*
- Periodic Event-Triggered Control for Nonlinear Networked Control Systems. Wang, W., +, TAC Feb. 2020 620-635
- Reduced-Order Observer Design for Boolean Control Networks. Zhang, Z., +, TAC Jan. 2020 434-441
- Reduced-Order Observer Design for Switched Descriptor Systems With Unknown Inputs. Zhang, J., +, TAC Jan. 2020 287-294
- Robust Cooperative Output Regulation of Heterogeneous Uncertain Linear Multiagent Systems With Time-Varying Communication Topologies. *Wang, L.*, +, *TAC Oct. 2020 4340-4347*
- Secure State Estimation for Multiagent Systems With Faulty and Malicious Agents. Lu, A., +, TAC Aug. 2020 3471-3485
- Stabilization of Highly Nonlinear Hybrid Systems by Feedback Control Based on Discrete-Time State Observations. *Fei, C.*, +, *TAC July 2020* 2899-2912
- State Observers for Systems Subject to Bounded Disturbances Using Quadratic Boundedness. *Alessandri, A.*, +, *TAC Dec. 2020 5352-5359*
- Uniting Observers. Astolfi, D., +, TAC July 2020 2867-2882

When Is a Nonlinear System Semiglobally Asymptotically Stabilizable by Digital Feedback?. *Lin, W., TAC Nov. 2020 4584-4599*

Oil drilling

Regulation of Inhomogeneous Drilling Model With a P-I Controller. Terrand-Jeanne, A., +, TAC Jan. 2020 58-71

Opacity

Transforming Opacity Verification to Nonblocking Verification in Modular Systems. *Mohajerani, S.*, +, *TAC April 2020 1739-1746*

Open loop systems

- Consensus of Linear Multiagent Systems With Distributed Infinite Transmission Delays: A Low Gain Approach. *Xu, X.,* +, *TAC Feb. 2020 809-816* Equilibrium Solutions of Multiperiod Mean-Variance Portfolio Selection. *Ni, Y.,* +, *TAC April 2020 1716-1723*
- Extending the Best Linear Approximation Framework to the Process Noise Case. Schoukens, M., +, TAC April 2020 1514-1524
- Inverse Open-Loop Noncooperative Differential Games and Inverse Optimal Control. *Molloy, T.L.*, +, *TAC Feb. 2020 897-904*
- Optical filters
 - Design of a Quantum Projection Filter. Gao, Q., +, TAC Aug. 2020 3693-3700

Optimal control

- A Decentralized Event-Based Approach for Robust Model Predictive Control. *Kolarijani, A.S.*, +, *TAC Aug. 2020 3517-3529*
- A Proof on Equivalence of Stagewise Newton and Dreyfus's Successive Approximation Procedures. *Mizutani, E., TAC June 2020 2716-2723*
- A Simple Proof of Indefinite Linear-Quadratic Stochastic Optimal Control With Random Coefficients. *Moon, J.*, +, *TAC Dec. 2020 5422-5428*
- Analyzing Controllability of Bilinear Systems on Symmetric Groups: Mapping Lie Brackets to Permutations. Zhang, W., +, TAC Nov. 2020 4895-4901
- Approximate Controllability and Approximate Observability of Singular Distributed Parameter Systems. *Ge*, *Z*., +, *TAC May 2020 2294-2299*
- Asymptotic Optimality of Finite Model Approximations for Partially Observed Markov Decision Processes With Discounted Cost. Saldi, N., +, TAC Jan. 2020 130-142
- Combining Pontryagin's Principle and Dynamic Programming for Linear and Nonlinear Systems. Sassano, M., +, TAC Dec. 2020 5312-5327
- Computing Optimal Control of Cascading Failure in DC Networks. *Ba*, *Q*., +, *TAC June 2020 2402-2417*
- Control of Continuous-Time Linear Systems With Markov Jump Parameters in Reverse Time. *Narvaez, A.R.R.*, +, *TAC May 2020 2265-2271*
- Converse Optimality for Discrete-Time Systems. Gohrt, T., +, TAC May 2020 2257-2264
- Data Informativity: A New Perspective on Data-Driven Analysis and Control. van Waarde, H.J., +, TAC Nov. 2020 4753-4768
- Data-Driven Economic NMPC Using Reinforcement Learning. Gros, S., +, TAC Feb. 2020 636-648
- Decentralized Goal Assignment and Safe Trajectory Generation in Multirobot Networks via Multiple Lyapunov Functions. *Panagou, D.*, +, *TAC Aug. 2020 3365-3380*
- Distributed Model Predictive Control for Linear Systems With Adaptive Terminal Sets. Darivianakis, G., +, TAC March 2020 1044-1056
- Distributed Optimal Coordination for Heterogeneous Linear Multiagent Systems With Event-Triggered Mechanisms. *Li*, *Z.*, +, *TAC April 2020* 1763-1770
- Extremum Seeking Control With Input Dead-Zone. Shao, G., +, TAC July 2020 3184-3190
- Graphon Control of Large-Scale Networks of Linear Systems. Gao, S., +, TAC Oct. 2020 4090-4105
- Inverse Open-Loop Noncooperative Differential Games and Inverse Optimal Control. *Molloy, T.L.,* +, *TAC Feb. 2020 897-904*
- Markov Chains With Maximum Return Time Entropy for Robotic Surveillance. Duan, X., +, TAC Jan. 2020 72-86
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*
- Near Optimality of Linear Strategies for Static Teams With "Big" Non-Gaussian Noise. Kulkarni, A.A., TAC Feb. 2020 534-545
- On the Use of Supervised Clustering in Stochastic NMPC Design. *Alamir,* M., TAC Dec. 2020 5392-5398
- Optimal Control of Endoatmospheric Launch Vehicle Systems: Geometric and Computational Issues. *Bonalli, R., +, TAC June 2020 2418-2433*

- Optimal Control of Polynomial Hybrid Systems via Convex Relaxations. Zhao, P., +, TAC May 2020 2062-2077
- Optimal Event-Triggered Control of Nondeterministic Linear Systems. Maity, D., +, TAC Feb. 2020 604-619
- Optimal Local and Remote Controllers With Unreliable Uplink Channels: An Elementary Proof. *Afshari, M.*, +, *TAC Aug. 2020 3616-3622*
- Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. *Wu, G.*, +, *TAC Sept. 2020 3919-3926*
- Optimal Secure Control With Linear Temporal Logic Constraints. Niu, L., +, TAC June 2020 2434-2449
- Optimality and Passivity of Input-Quadratic Nonlinear Systems. Sassano, M., +, TAC Aug. 2020 3229-3240
- Output Tracking of Boolean Control Networks. Zhang, X., +, TAC June 2020 2730-2735
- Over-Approximation of Fluid Models. Tschaikowski, M., TAC March 2020 999-1013
- Quadratic Optimal Control of Linear Complementarity Systems: First-Order Necessary Conditions and Numerical Analysis. Vieira, A., +, TAC June 2020 2743-2750
- Self-Learning Optimal Regulation for Discrete-Time Nonlinear Systems Under Event-Driven Formulation. *Wang, D.*, +, *TAC March 2020 1272-1279*
- Sensitivity-Based Warmstarting for Nonlinear Model Predictive Control With Polyhedral State and Control Constraints. *Liao-McPherson*, D., +, *TAC Oct. 2020 4288-4294*
- Set-Valued Feedback Control and Its Application to Event-Triggered Sampled-Data Systems. *Jiang, Y.*, +, *TAC Nov. 2020 4965-4972*
- State-Constrained Nonlinear L₂-Gain Control. Wu, J., +, TAC Feb. 2020 771-777
- Stochastic Control and Nonequilibrium Thermodynamics: Fundamental Limits. Chen, Y., +, TAC July 2020 2979-2991
- Sub-Riemannian Geodesics in *SU(n/S(U(n-1 × U(1))*) and Optimal Control of Three Level Quantum Systems. *Albertini, F., +, TAC March 2020 1176-1191*
- Symmetry Reduction in Optimal Control of Multiagent Systems on Lie Groups. Colombo, L.J., +, TAC Nov. 2020 4973-4980
- Variational Integrators for Dissipative Systems. Limebeer, D.J.N., +, TAC April 2020 1381-1396

Optimization

- p-Safe Analysis of Stochastic Hybrid Processes. Wisniewski, R., +, TAC Dec. 2020 5220-5235
- A Fast Distributed Asynchronous Newton-Based Optimization Algorithm. Mansoori, F., +, TAC July 2020 2769-2784
- A Generalized Framework For Kullback–Leibler Markov Aggregation. Amjad, R.A., +, TAC July 2020 3068-3075
- A Proximal Diffusion Strategy for Multiagent Optimization With Sparse Affine Constraints. *Alghunaim, S.A.*, +, *TAC Nov. 2020 4554-4567*
- A Set-Membership Approach to Event-Triggered Filtering for General Nonlinear Systems Over Sensor Networks. *Ding, D.*, +, *TAC April 2020 1792-1799*
- A Smooth Double Proximal Primal-Dual Algorithm for a Class of Distributed Nonsmooth Optimization Problems. *Wei*, *Y*, +, *TAC April 2020 1800-1806*
- A Stabilization Framework for the Output Regulation of Rational Nonlinear Systems. Castro, R.d.S., +, TAC Nov. 2020 4860-4865
- A Topology for Team Policies and Existence of Optimal Team Policies in Stochastic Team Theory. Saldi, N., TAC Jan. 2020 310-317
- Achieving Linear Convergence in Distributed Asynchronous Multiagent Optimization. *Tian, Y.*, +, *TAC Dec. 2020 5264-5279*
- An H_i/H_∞ Optimization Approach to Event-Triggered Fault Detection for Linear Discrete Time Systems. Zhong, M., +, TAC Oct. 2020 4464-4471
- An Explicit Reference Governor for the Intersection of Concave Constraints. Hosseinzadeh, M., +, TAC Jan. 2020 1-11
- An Online Approach to Physical Watermark Design. *Liu, H., +, TAC Sept.* 2020 3895-3902
- Combining Linear Algebra and Numerical Optimization for Gray-Box Affine State-Space Model Identification. Prot, O., +, TAC Aug. 2020 3272-3285

- Computing Optimal Control of Cascading Failure in DC Networks. *Ba*, *Q*., +, *TAC June 2020 2402-2417*
- Constrained Search via Penalization for Continuous Simulation Optimization. Hu, L., +, TAC Nov. 2020 4741-4752
- Continuous-Time Accelerated Methods via a Hybrid Control Lens. Kolarijani, A.S., +, TAC Aug. 2020 3425-3440
- Control-Oriented Learning on the Fly. Ornik, M., +, TAC Nov. 2020 4800-4807
- Decentralized Optimization Over Time-Varying Directed Graphs With Row and Column-Stochastic Matrices. *Saadatniaki*, F., +, *TAC Nov. 2020 4769-4780*
- Distributed Coupled Multiagent Stochastic Optimization. Alghunaim, S.A., +, TAC Jan. 2020 175-190
- Distributed Finite-Time Optimization for Integrator Chain Multiagent Systems With Disturbances. Wang, X., +, TAC Dec. 2020 5296-5311
- Distributed Kalman Filters With State Equality Constraints: Time-Based and Event-Triggered Communications. *He, X.*, +, *TAC Jan. 2020 28-43*
- Distributed Model Predictive Control for Linear Systems With Adaptive Terminal Sets. Darivianakis, G., +, TAC March 2020 1044-1056
- Distributed Smooth Convex Optimization With Coupled Constraints. *Liang*, S., +, TAC Jan. 2020 347-353
- Distributed Stochastic Approximation Algorithm With Expanding Truncations. Lei, J., +, TAC Feb. 2020 664-679
- Economic Model Predictive Control for Time-Varying Cost and Peak Demand Charge Optimization. *Risbeck, M.J.*, +, *TAC July 2020 2957-2968*
- Efficient Simulation Budget Allocation With Bound Information. Li, H., +, TAC Jan. 2020 207-222
- Finding the Equilibrium for Continuous Constrained Markov Games Under the Average Criteria. *Jiang, X.*, +, *TAC Dec. 2020 5399-5406*
- Gradient-Based Discrete-Time Concurrent Learning for Standalone Function Approximation. Djaneye-Boundjou, O., +, TAC Feb. 2020 749-756
- Guest Editorial: Special Issue on Security and Privacy of Distributed Algorithms and Network Systems. *Chen, Z.*, +, *TAC Sept. 2020 3725-3727*
- Minimum Cost Feedback Selection in Structured Systems: Hardness and Approximation Algorithm. Joshi, A., +, TAC Dec. 2020 5517-5524
- Minimum-Energy Distributed Consensus Control of Multiagent Systems: A Network Approximation Approach. Chen, F., +, TAC March 2020 1144-1159
- Near Optimality of Linear Strategies for Static Teams With "Big" Non-Gaussian Noise. Kulkarni, A.A., TAC Feb. 2020 534-545
- On the Dynamics of Distributed Energy Adoption: Equilibrium, Stability, and Limiting Capacity. Sun, T., +, TAC Jan. 2020 102-114
- On the LQG Game With Nonclassical Information Pattern Using a Direct Solution Method. *Clemens, J.W.*, +, *TAC May 2020 2078-2093*
- Optimal Secure Control With Linear Temporal Logic Constraints. Niu, L., +, TAC June 2020 2434-2449
- Performance Improvement via Iterative Connection of Passive Systems. Urata, K., +, TAC March 2020 1325-1332
- Quantum State Filter With Disturbance and Noise. Zhang, J., +, TAC July 2020 2856-2866
- Randomized Gradient-Free Distributed Optimization Methods for a Multiagent System With Unknown Cost Function. *Pang, Y.*, +, *TAC Jan. 2020* 333-340
- RBFNN-Based Minimum Entropy Filtering for a Class of Stochastic Nonlinear Systems. Yin, X., +, TAC Jan. 2020 376-381
- Reduced-Order H_{∞} Filter Design for Delta Operator Systems Over Multiple Frequency Intervals. *Yang, H.*, +, *TAC Dec. 2020 5376-5383*
- Remote State Estimation With Stochastic Event-Triggered Sensor Schedule and Packet Drops. Xu, L., +, TAC Nov. 2020 4981-4988
- Renewal Monte Carlo: Renewal Theory-Based Reinforcement Learning. Subramanian, J., +, TAC Aug. 2020 3663-3670
- Resilient Distributed Optimization Algorithm Against Adversarial Attacks. Zhao, C., +, TAC Oct. 2020 4308-4315
- Riemannian Optimal Identification Method for Linear Systems With Symmetric Positive-Definite Matrix. Sato, K., +, TAC Nov. 2020 4493-4508
- Stochastic Control of Multidimensional Systems With Relative Optimization. Cao, X., TAC May 2020 1886-1900

Whittle Index Policy for Dynamic Multichannel Allocation in Remote State Estimation. *Wang, J.*, +, *TAC Feb. 2020 591-603*

Oscillations

Global Analysis of Synchronization Performance for Power Systems: Bridging the Theory-Practice Gap. *Paganini*, F., +, *TAC July 2020 3007-3022*

Oscillators

An Attack-Resilient Pulse-Based Synchronization Strategy for General Connected Topologies. Wang, Z., +, TAC Sept. 2020 3784-3799

Orbital Stability Analysis for Perturbed Nonlinear Systems and Natural Entrainment via Adaptive Andronov–Hopf Oscillator. *Zhao, J.*, +, *TAC Jan. 2020 87-101*

Synchronization of Kuramoto Oscillators: A Regional Stability Framework. Zhu, L., +, TAC Dec. 2020 5070-5082

Output feedback

Output Feedback Approximation-Free Prescribed Performance Tracking Control for Uncertain MIMO Nonlinear Systems. *Dimanidis, I.S.*, +, *TAC Dec. 2020 5058-5069*

Р

Parabolic equations

- An LMI Approach to Stability Analysis of Coupled Parabolic Systems. Wakaiki, M., TAC Jan. 2020 404-411
- Backstepping Control of Coupled Linear Parabolic PDEs With Space and Time Dependent Coefficients. *Kerschbaum, S.*, +, *TAC July 2020 3060-3067*
- Fredholm Backstepping Control of Coupled Linear Parabolic PDEs With Input and Output Delays. *Deutscher*, J., +, *TAC July 2020 3128-3135*
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*
- Reduced Order Controller Design for Robust Output Regulation. *Paunonen*, L., +, *TAC June 2020 2480-2493*
- Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs. *Deutscher, J., +, TAC May 2020 2207-2214*

Stochastic Control and Nonequilibrium Thermodynamics: Fundamental Limits. Chen, Y., +, TAC July 2020 2979-2991

Parameter estimation

Adaptive Control by Regulation-Triggered Batch Least Squares. *Karafyllis*, *I.*, +, *TAC July 2020 2842-2855*

- Adaptive Event-Triggered Control of Nonlinear Systems With Controller and Parameter Estimator Triggering. *Huang, J.*, +, *TAC Jan. 2020 318-324*
- Combining Linear Algebra and Numerical Optimization for Gray-Box Affine State-Space Model Identification. *Prot, O.*, +, *TAC Aug. 2020 3272-3285*
- Constrained Subspace Method for the Identification of Structured State-Space Models (COSMOS). Yu, C., +, TAC Oct. 2020 4201-4214
- Identification of Linear Models From Quantized Data: A Midpoint-Projection Approach. *Risuleo, R.S.,* +, *TAC July 2020 2801-2813*

Interval Error Correction Auxiliary Model Based Gradient Iterative Algorithms for Multirate ARX Models. Chen, J., +, TAC Oct. 2020 4385-4392

Inverse Open-Loop Noncooperative Differential Games and Inverse Optimal Control. *Molloy, T.L.*, +, *TAC Feb. 2020 897-904*

- Koopman-Based Lifting Techniques for Nonlinear Systems Identification. Mauroy, A., +, TAC June 2020 2550-2565
- On Robust Parameter Estimation in Finite-Time Without Persistence of Excitation. Wang, J., +, TAC April 2020 1731-1738
- Realization of Reachability for the Control of a Class of Nonlinear Systems. Chai, Y., +, TAC March 2020 1073-1088
- Set Membership Identification of Linear Systems With Guaranteed Simulation Accuracy. *Lauricella*, M., +, TAC Dec. 2020 5189-5204

UD-Based Pairwise and MIMO Kalman-Like Filtering for Estimation of Econometric Model Structures. *Kulikova, M.V.*, +, *TAC Oct. 2020 4472-*4479

Partial differential equations

Adding Integral Action for Open-Loop Exponentially Stable Semigroups and Application to Boundary Control of PDE Systems. *Terrand-Jeanne*, *A.*, +, *TAC Nov. 2020 4481-4492*

Algorithm to Compute Nonlinear Partial Observer Normal Form With Multiple Outputs. Saadi, W., +, TAC June 2020 2700-2707

- An LMI Approach to Stability Analysis of Coupled Parabolic Systems. Wakaiki, M., TAC Jan. 2020 404-411
- Analysis of the Existence of Equilibrium Profiles in Nonisothermal Axial Dispersion Tubular Reactors. *Hastir, A.*, +, *TAC April 2020 1525-1536*
- Backstepping Control of Coupled Linear Parabolic PDEs With Space and Time Dependent Coefficients. *Kerschbaum, S.*, +, *TAC July 2020 3060-3067*
- Combining Pontryagin's Principle and Dynamic Programming for Linear and Nonlinear Systems. Sassano, M., +, TAC Dec. 2020 5312-5327
- Disturbance Attenuation by Measurement Feedback in Nonlinear Systems via Immersion and Algebraic Conditions. *Mylvaganam, T., +, TAC Feb. 2020 854-860*
- Fredholm Backstepping Control of Coupled Linear Parabolic PDEs With Input and Output Delays. *Deutscher*, J., +, *TAC July 2020 3128-3135*
- Gradient Flow Algorithms for Density Propagation in Stochastic Systems. *Caluya, K.F.*, +, *TAC Oct. 2020 3991-4004*
- Inner-Approximating Reachable Sets for Polynomial Systems With Time-Varying Uncertainties. *Xue, B., +, TAC April 2020 1468-1483*
- Linear Quadratic Mean Field Games: Asymptotic Solvability and Relation to the Fixed Point Approach. *Huang, M., +, TAC April 2020 1397-1412*
- Mean Field Games With Parametrized Followers. *Bensoussan, A.*, +, *TAC Jan. 2020 12-27*
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*
- Observers and Disturbance Rejection Control for a Heat Equation. Feng, H., +, TAC Nov. 2020 4957-4964
- Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498
- Output Feedback Stabilization for a Class of First-Order Equation Setting of Collocated Well-Posed Linear Systems With Time Delay in Observation. *Guo*, *B.*, +, *TAC June 2020 2612-2618*
- Proper Orthogonal Decomposition Method to Nonlinear Filtering Problems in Medium-High Dimension. *Wang*, Z., +, *TAC April 2020 1613-1624*
- Reduced Order Controller Design for Robust Output Regulation. *Paunonen*, L., +, *TAC June 2020 2480-2493*
- Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs. *Deutscher, J., +, TAC May 2020 2207-2214*
- Singularities and Moments of Nonlinear Systems. Padoan, A., +, TAC Aug. 2020 3647-3654
- Stability Analysis for a Class of Linear 2 × 2 Hyperbolic PDEs Using a Backstepping Transform. *Bou Saba*, *D.*, +, *TAC July 2020 2941-2956*

Stability Analysis of Linear Partial Differential Equations With Generalized Energy Functions. Gahlawat, A., +, TAC May 2020 1924-1939

Well-Posedness of Time-Varying Linear Systems. Kurula, M., TAC Oct. 2020 4075-4089

Path planning

Dynamic Attitude Planning for Trajectory Tracking in Thrust-Vectoring UAVs. Invernizzi, D., +, TAC Jan. 2020 453-460

Pattern classification

Interaction-Based Distributed Learning in Cyber-Physical and Social Networks. Sasso, F., +, TAC Jan. 2020 223-236

Pattern clustering

Clustering-Based Model Reduction of Laplacian Dynamics With Weakly Connected Topology. Cheng, X., +, TAC Oct. 2020 4393-4399

Structuring Multilevel Discrete-Event Systems With Dependence Structure Matrices. *Goorden, M.*, +, *TAC April 2020 1625-1639*

PD control

Realization of Reachability for the Control of a Class of Nonlinear Systems. *Chai, Y., +, TAC March 2020 1073-1088*

Pendulums

Global Sliding Mode Observers for Some Uncertain Mechanical Systems. *Apaza-Perez, W.A.*, +, *TAC March 2020 1348-1355*

- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984
- Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks. *Peng, C.*, +, *TAC Sept. 2020* 3943-3949

Performance index

On the LQG Game With Nonclassical Information Pattern Using a Direct Solution Method. Clemens, J.W., +, TAC May 2020 2078-2093

Periodic control

- A Note on Uniform Exponential Stability of Linear Periodic Time-Varying Systems. Vrabel, R., TAC April 2020 1647-1651
- Analysis and Design of Continuous-Time Multivariable Periodic Controllers: An \mathcal{H}_{∞} /LTR-Based Approach. *Deshmukh*, A., +, TAC Aug. 2020 3608-3615
- Lyapunov Event-Triggered Stabilization With a Known Convergence Rate. *Proskurnikov, A.V.,* +, *TAC Feb. 2020 507-521*
- On the Existence and Uniqueness of Poincaré Maps for Systems With Impulse Effects. Goodman, J.R., +, TAC April 2020 1815-1821

Permanent magnet motors

Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes. Zhang, C., +, TAC May 2020 2185-2191

Perturbation

Corrections to "Stochastic Stability of Perturbed Learning Automata in Positive-Utility Games" [Nov 19 4454-4469]. *Chasparis, G.C., TAC April* 2020 1822

Perturbation methods

- A New Varying-Gain-Exponent-Based Differentiator/Observer: An Efficient Balance Between Linear and Sliding-Mode Algorithms. *Ghanes, M.*, +, *TAC Dec. 2020 5407-5414*
- Static Sliding Mode Control of Systems With Arbitrary Relative Degree by Using Artificial Delay. Xu, J., +, TAC Dec. 2020 5464-5471

Perturbation techniques

- Behavior ofnInfinite Chains of Kinematic Points With the Immediate-Neighbors Interaction Dynamics. Athalye, C.D., +, TAC July 2020 2929-2940
- Control-Oriented Learning on the Fly. Ornik, M., +, TAC Nov. 2020 4800-4807
- Higher Order Sliding Mode Control Using Discontinuous Integral Action. Cruz-Zavala, E., +, TAC Oct. 2020 4316-4323
- Input-to-State Stability of a Clamped-Free Damped String in the Presence of Distributed and Boundary Disturbances. *Lhachemi, H.*, +, *TAC March* 2020 1248-1255
- Orbital Stability Analysis for Perturbed Nonlinear Systems and Natural Entrainment via Adaptive Andronov–Hopf Oscillator. *Zhao, J.*, +, *TAC Jan. 2020 87-101*
- The Implicit Discretization of the Supertwisting Sliding-Mode Control Algorithm. *Brogliato, B.,* +, *TAC Aug. 2020 3707-3713*
- Well-Posedness of Time-Varying Linear Systems. Kurula, M., TAC Oct. 2020 4075-4089

Perturbation theory

Singular Perturbation Analysis of a Coupled System Involving the Wave Equation. Cerpa, E., +, TAC Nov. 2020 4846-4853

Petri nets

- An Approach to Improve Permissiveness of Supervisors for GMECs in Time Petri Net Systems. *Li*, *L.*, +, *TAC Jan. 2020 237-251*
- Computation of Admissible Marking Sets in Weighted Synchronization-Free Petri Nets by Dynamic Programming. *Ma*, *Z*., +, *TAC June 2020 2662-2669*
- Critical Observability for Automata and Petri Nets. Masopust, T., TAC Jan. 2020 341-346
- Divergence Properties of Labeled Petri Nets and Their Relevance for Diagnosability Analysis. *Giua*, *A.*, +, *TAC July 2020 3092-3097*
- Marking Estimation in a Class of Time Labeled Petri Nets. Ma, Z., +, TAC Feb. 2020 493-506
- On Liveness Enforcing Supervisory Policies for Arbitrary Petri Nets. *Chen*, *C.*, +, *TAC Dec.* 2020 5236-5247
- Steady State Analysis of Flexible Nets. Julvez, J., +, TAC June 2020 2510-2525

Structural Controller for Logical Expression of Linear Constraints on Petri Nets. *Luo*, J., +, *TAC Jan. 2020 397-403*

PI control

Regulation of Inhomogeneous Drilling Model With a P-I Controller. Terrand-Jeanne, A., +, TAC Jan. 2020 58-71

Piecewise linear techniques

- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y*, +, *TAC Aug. 2020 3714-3721*
- Sensitivity to Cumulative Perturbations for a Class of Piecewise Constant Hybrid Systems. *Sharifnassab, A., +, TAC March 2020 1057-1072*

Piecewise polynomial techniques

Safe Controller Synthesis for Data-Driven Differential Inclusions. *Ahmadi, M.*, +, *TAC Nov. 2020 4934-4940*

Poincare mapping

- On the Existence and Uniqueness of Poincaré Maps for Systems With Impulse Effects. *Goodman, J.R.*, +, *TAC April 2020 1815-1821*
- Poles and zeros On Unknown Input Observers of Linear Systems: Asymptotic Unknown Input Decoupling Approach. *Ichalal, D.*, +, *TAC March 2020 1197-1202*

Polynomials

- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
- Average Consensus by Graph Filtering: New Approach, Explicit Convergence Rate, and Optimal Design. Yi, J., +, TAC Jan. 2020 191-206
- Blind Learning of Tree Network Topologies in the Presence of Hidden Nodes. Sepehr, F., +, TAC March 2020 1014-1028
- Efficient Liveness Assessment for Traffic States in Open, Irreversible, Dynamically Routed, Zone-Controlled Guidepath-Based Transport Systems. *Reveliotis*, S., +, *TAC July 2020 2883-2898*
- Inner-Approximating Reachable Sets for Polynomial Systems With Time-Varying Uncertainties. *Xue, B., +, TAC April 2020 1468-1483*
- Necessary and Sufficient Conditions for 2pth Moment Stability of Several Classes of Linear Stochastic Systems. *Luo, S.*, +, *TAC July 2020 3084-3091*
- Necessary and Sufficient Topological Conditions for Identifiability of Dynamical Networks. van Waarde, H.J., +, TAC Nov. 2020 4525-4537
- On Algebraic Proofs of Stability for Homogeneous Vector Fields. *Ahmadi*, *A.A.*, +, *TAC Jan. 2020 325-332*
- Optimal Control of Polynomial Hybrid Systems via Convex Relaxations. Zhao, P., +, TAC May 2020 2062-2077
- Quasi-Polynomial-Based Robust Stability of Time-Delay Systems Can be Less Conservative Than Lyapunov–Krasovskii Approaches. *Angulo, S.*, +, *TAC July 2020 3164-3169*
- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, D., +, *TAC May 2020 2300-2307*
- Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs. *Deutscher, J., +, TAC May 2020 2207-2214*
- Stability Analysis of Linear Coupled Differential-Difference Systems With General Distributed Delays. *Feng, Q., +, TAC March 2020 1356-1363*
- Stability Analysis of Linear Partial Differential Equations With Generalized Energy Functions. *Gahlawat*, A., +, *TAC May 2020 1924-1939*
- Structured Feedback Synthesis for Stability and Performance of Switched Systems. Chesi, G., +, TAC Nov. 2020 4695-4709

Position control

- Distributed Leader–Follower Affine Formation Maneuver Control for High-Order Multiagent Systems. Chen, L., +, TAC Nov. 2020 4941-4948
- Dynamic Modularity Approach to Adaptive Control of Robotic Systems With Closed Architecture. *Wang, H.,* +, *TAC June 2020 2760-2767*
- Leader-Following Consensus for a Class of Multiple Robot Manipulators over Switching Networks by Distributed Position Feedback Control. *He*, *C.*, +, *TAC Feb. 2020 890-896*
- Limit-Cycle-Based Design of Formation Control for Mobile Agents. *Wang*, *C.*, +, *TAC Aug. 2020 3530-3543*
- Ratio-of-Distance Rigidity Theory With Application to Similar Formation Control. *Cao, K.*, +, *TAC June 2020 2598-2611*
- Trajectory-Constrained Collective Circular Motion With Different Phase Arrangements. Jain, A., +, TAC May 2020 2237-2244

Power control

Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498 Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401

Power distribution economics

On the Dynamics of Distributed Energy Adoption: Equilibrium, Stability, and Limiting Capacity. *Sun, T., +, TAC Jan. 2020 102-114*

Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401

Power engineering computing

Detection of Covert Cyber-Attacks in Interconnected Systems: A Distributed Model-Based Approach. *Barboni, A.*, +, *TAC Sept. 2020 3728-3741*

Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. Wu, G., +, TAC Sept. 2020 3919-3926

Power generation control

Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401

Power generation economics

On the Dynamics of Distributed Energy Adoption: Equilibrium, Stability, and Limiting Capacity. Sun, T., +, TAC Jan. 2020 102-114

Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401

Power grids

Global Analysis of Synchronization Performance for Power Systems: Bridging the Theory-Practice Gap. Paganini, F., +, TAC July 2020 3007-3022

Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401

Power markets

On the Dynamics of Distributed Energy Adoption: Equilibrium, Stability, and Limiting Capacity. *Sun, T., +, TAC Jan. 2020 102-114*

Power system control

- Computing Optimal Control of Cascading Failure in DC Networks. *Ba*, *Q*., +, *TAC June 2020 2402-2417*
- Distributed Coupled Multiagent Stochastic Optimization. Alghunaim, S.A., +, TAC Jan. 2020 175-190
- Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads. *Kim, H.,* +, *TAC Nov. 2020 4887-4894*
- Global Analysis of Synchronization Performance for Power Systems: Bridging the Theory-Practice Gap. Paganini, F., +, TAC July 2020 3007-3022
- Multilevel Power-Imbalance Allocation Control for Secondary Frequency Control of Power Systems. Xi, K., +, TAC July 2020 2913-2928
- Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. Wu, G., +, TAC Sept. 2020 3919-3926
- Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498

Power system economics

Multilevel Power-Imbalance Allocation Control for Secondary Frequency Control of Power Systems. Xi, K., +, TAC July 2020 2913-2928

Power system interconnection

Centralized Versus Decentralized Detection of Attacks in Stochastic Interconnected Systems. *Anguluri, R., +, TAC Sept. 2020 3903-3910*

Power system security

Actuator Security Indices Based on Perfect Undetectability: Computation, Robustness, and Sensor Placement. *Milosevic, J.*, +, *TAC Sept. 2020 3816-3831*

Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. *Wu, G.*, +, *TAC Sept. 2020 3919-3926*

Power system stability

A Tool for Analysis of Existence of Equilibria and Voltage Stability in Power Systems With Constant Power Loads. *Matveev, A.S.*, +, *TAC Nov. 2020* 4726-4740

- Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads. *Kim, H.,* +, *TAC Nov. 2020 4887-4894*
- Global Analysis of Synchronization Performance for Power Systems: Bridging the Theory-Practice Gap. Paganini, F., +, TAC July 2020 3007-3022

Multilevel Power-Imbalance Allocation Control for Secondary Frequency Control of Power Systems. Xi, K., +, TAC July 2020 2913-2928 Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. Wu, G., +, TAC Sept. 2020 3919-3926

Power system state estimation

Secure State Estimation With Byzantine Sensors: A Probabilistic Approach. *Ren, X.,* +, *TAC Sept. 2020 3742-3757*

Predictive control

- A Bounded-Variable Least-Squares Solver Based on Stable QR Updates. Saraf, N., +, TAC March 2020 1242-1247
- A Decentralized Event-Based Approach for Robust Model Predictive Control. *Kolarijani, A.S.*, +, *TAC Aug. 2020 3517-3529*
- A Nonlinear Model Predictive Control Framework Using Reference Generic Terminal Ingredients. *Kohler, J.*, +, *TAC Aug. 2020 3576-3583*
- Codesign of Event Trigger and Feedback Policy in Robust Model Predictive Control. *Liu*, *C*., +, *TAC Jan. 2020 302-309*
- Constrained Adaptive Model-Predictive Control for a Class of Discrete-Time Linear Systems With Parametric Uncertainties. *Zhu, B., +, TAC May 2020* 2223-2229
- Corrections to "Model Predictive Control for Stochastic Max-Plus Linear Systems With Chance Constraints,". *Boom, T.J.J.v.d.*, +, *TAC Feb. 2020* 905-906
- Data-Driven Economic NMPC Using Reinforcement Learning. Gros, S., +, TAC Feb. 2020 636-648
- Distributed Model Predictive Control for Linear Systems With Adaptive Terminal Sets. Darivianakis, G., +, TAC March 2020 1044-1056
- Economic Model Predictive Control for Time-Varying Cost and Peak Demand Charge Optimization. *Risbeck, M.J.*, +, *TAC July 2020 2957-2968*
- Lebesgue-Approximation Model Predictive Control of Nonlinear Sampled-Data Systems. *Tao, J.*, +, *TAC Oct. 2020 4047-4060*
- Model Predictive Tracking Control for Invariant Systems on Matrix Lie Groups via Stable Embedding Into Euclidean Spaces. *Chang, D.E.*, +, *TAC July 2020 3191-3198*
- On the Use of Supervised Clustering in Stochastic NMPC Design. *Alamir, M., TAC Dec. 2020 5392-5398*
- Optimal Construction of Koopman Eigenfunctions for Prediction and Control. *Korda, M.*, +, *TAC Dec. 2020 5114-5129*
- Parametric Optimization Based MPC for Systems of Systems With Affine Coordination Constraints. *Novoselnik*, B., +, *TAC Feb. 2020 649-663*
- Robust Economic Model Predictive Control of Continuous-Time Epidemic Processes. *Watkins, N.J.*, +, *TAC March 2020 1116-1131*
- Sensitivity-Based Warmstarting for Nonlinear Model Predictive Control With Polyhedral State and Control Constraints. *Liao-McPherson*, D., +, *TAC Oct. 2020 4288-4294*

Pricing

- Deep Teams: Decentralized Decision Making With Finite and Infinite Number of Agents. *Arabneydi*, J., +, *TAC Oct. 2020 4230-4245*
- Economic Model Predictive Control for Time-Varying Cost and Peak Demand Charge Optimization. *Risbeck, M.J.*, +, *TAC July 2020 2957-2968* On the Dynamics of Distributed Energy Adoption: Equilibrium, Stability, and Limiting Capacity. *Sun, T.*, +, *TAC Jan. 2020 102-114*

Privacy

Guest Editorial: Special Issue on Security and Privacy of Distributed Algorithms and Network Systems. *Chen, Z.*, +, *TAC Sept. 2020 3725-3727*

Probabilistic logic

- *p*-Safe Analysis of Stochastic Hybrid Processes. *Wisniewski, R., +, TAC Dec.* 2020 5220-5235
- Compositional (In)Finite Abstractions for Large-Scale Interconnected Stochastic Systems. *Lavaei*, A., +, TAC Dec. 2020 5280-5295

Probability

- An Iterative Learning Control Algorithm With Gain Adaptation for Stochastic Systems. Shen, D., +, TAC March 2020 1280-1287
- Analysis of Stochastic Approximation Schemes With Set-Valued Maps in the Absence of a Stability Guarantee and Their Stabilization. *Yaji, V.G.*, +, *TAC March 2020 1100-1115*
- Asymptotic Optimality of Finite Model Approximations for Partially Observed Markov Decision Processes With Discounted Cost. Saldi, N., +, TAC Jan. 2020 130-142
- Asymptotical Stability of Probabilistic Boolean Networks With State Delays. Zhu, S., +, TAC April 2020 1779-1784

Collective Stochastic Discrete Choice Problems: A Min-LQG Dynamic Game Formulation. Salhab, R., +, TAC Aug. 2020 3302-3316

- Deep Teams: Decentralized Decision Making With Finite and Infinite Number of Agents. *Arabneydi*, J., +, *TAC Oct. 2020 4230-4245*
- Distributed Second-Order Methods With Increasing Number of Working Nodes. Jerinkic, N.K., +, TAC Feb. 2020 846-853
- Event-Triggered H_∞ Control of Networked Control Systems With Distributed Transmission Delay. Yan, S., +, TAC Oct. 2020 4295-4301
- Finite-Time Guarantees for Byzantine-Resilient Distributed State Estimation With Noisy Measurements. Su, L., +, TAC Sept. 2020 3758-3771
- Logic-Based Switching Control for Stabilization of Stochastic Feedforward Nonlinear Systems. Yu, M., TAC Oct. 2020 4408-4415
- Markov Chains With Maximum Return Time Entropy for Robotic Surveillance. Duan, X., +, TAC Jan. 2020 72-86
- Metric and Topological Entropy Bounds for Optimal Coding of Stochastic Dynamical Systems. *Kawan, C.*, +, *TAC June 2020 2466-2479*
- Model Reduction of Markovian Jump Systems With Uncertain Probabilities. Shen, Y, +, TAC Jan. 2020 382-388
- MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels. *Cai, S.*, +, *TAC May 2020 2046-2061*
- Passivity-Based Control for Hidden Markov Jump Systems With Singular Perturbations and Partially Unknown Probabilities. *Li*, *F*, +, *TAC Aug.* 2020 3701-3706
- Push-Sum on Random Graphs: Almost Sure Convergence and Convergence Rate. *Rezaienia*, P., +, *TAC March 2020 1295-1302*
- Remote Estimation Over a Packet-Drop Channel With Markovian State. Chakravorty, J., +, TAC May 2020 2016-2031
- Risk of Collision and Detachment in Vehicle Platooning: Time-Delay– Induced Limitations and Tradeoffs. *Somarakis, C.*, +, *TAC Aug. 2020* 3544-3559
- Risk Probability Minimization Problems for Continuous-Time Markov Decision Processes on Finite Horizon. *Huo, H.*, +, *TAC July 2020 3199-3206*
- Secure State Estimation With Byzantine Sensors: A Probabilistic Approach. *Ren, X.*, +, *TAC Sept. 2020 3742-3757*
- Semi-Markov Jump Linear Systems With Incomplete Sojourn and Transition Information: Analysis and Synthesis. Ning, Z., +, TAC Jan. 2020 159-174
- Signal Selection for Estimation and Identification in Networks of Dynamic Systems: A Graphical Model Approach. *Materassi, D.*, +, *TAC Oct. 2020* 4138-4153
- Stability Theory of Stochastic Models in Opinion Dynamics. Askarzadeh, Z., +, TAC Feb. 2020 522-533
- Stealthy Actuator Signal Attacks in Stochastic Control Systems: Performance and Limitations. Fang, C., +, TAC Sept. 2020 3927-3934
- Stochastic Artificial Potentials for Online Safe Navigation. Paternain, S., +, TAC May 2020 1985-2000
- Stochastic Semistability for Nonlinear Dynamical Systems With Application to Consensus on Networks With Communication Uncertainty. *Haddad, W.M.*, +, *TAC July 2020 2826-2841*
- The Value of Timing Information in Event-Triggered Control. *Khojasteh*, M.J., +, TAC March 2020 925-940

Proteins

Adaptation Mechanisms in Phosphorylation Cycles By Allosteric Binding and Gene Autoregulation. *Fang, Z.*, +, *TAC Aug. 2020 3457-3470*

Protocols

- A Set-Membership Approach to Event-Triggered Filtering for General Nonlinear Systems Over Sensor Networks. *Ding, D.*, +, *TAC April 2020 1792-1799*
- Average Consensus by Graph Filtering: New Approach, Explicit Convergence Rate, and Optimal Design. *Yi*, *J.*, +, *TAC Jan. 2020 191-206*
- Delayed and Switched Control of Formations on a Line Segment: Delays and Switches Do Not Matter. *Aleksandrov, A.*, +, *TAC Feb. 2020 794-800*
- Energy-Efficient Time-Triggered Communication Policies for Wireless Networked Control Systems. Varma, V.S., +, TAC Oct. 2020 4324-4331

Protocol-Based Unscented Kalman Filtering in the Presence of Stochastic Uncertainties. *Liu, S.,* +, *TAC March 2020 1303-1309*

Psychology

Inverse Risk-Sensitive Reinforcement Learning. Ratliff, L.J., +, TAC March 2020 1256-1263

Q

Quadratic programming

- A Bounded-Variable Least-Squares Solver Based on Stable QR Updates. Saraf, N., +, TAC March 2020 1242-1247
- A Reference Governor for Nonlinear Systems With Disturbance Inputs Based on Logarithmic Norms and Quadratic Programming. *Li*, *N.*, +, *TAC July 2020 3207-3214*
- Approximate Controllability and Approximate Observability of Singular Distributed Parameter Systems. *Ge*, *Z*., +, *TAC May 2020 2294-2299*
- Input–Output Performance of Linear–Quadratic Saddle-Point Algorithms With Application to Distributed Resource Allocation Problems. *Simpson-Porco, J.W.*, +, *TAC May 2020 2032-2045*
- Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. Wu, G., +, TAC Sept. 2020 3919-3926
- Parametric Optimization Based MPC for Systems of Systems With Affine Coordination Constraints. *Novoselnik, B.*, +, *TAC Feb. 2020 649-663*
- Random Directions Stochastic Approximation With Deterministic Perturbations. Prashanth, L.A., +, TAC June 2020 2450-2465
- Sub-Riemannian Geodesics in *SU(n/S(U(n-1 × U(1))*) and Optimal Control of Three Level Quantum Systems. *Albertini, F., +, TAC March 2020 1176-1191*

Quantization (signal)

- Identification of Linear Models From Quantized Data: A Midpoint-Projection Approach. *Risuleo, R.S.*, +, *TAC July 2020 2801-2813*
- Moving Horizon Estimation With Unknown Inputs Under Dynamic Quantization Effects. Zou, L., +, TAC Dec. 2020 5368-5375
- Quantized Nonstationary Filtering of Networked Markov Switching RSNSs: A Multiple Hierarchical Structure Strategy. *Cheng, J.*, +, *TAC Nov. 2020* 4816-4823

Stabilization of Networked Control Systems Under DoS Attacks and Output Quantization. *Wakaiki*, M., +, *TAC Aug. 2020 3560-3575*

Quantum computing

Quantum Hamiltonian Identifiability via a Similarity Transformation Approach and Beyond. *Wang, Y.*, +, *TAC Nov. 2020 4632-4647*

Quantum entanglement

Quantum Hamiltonian Identifiability via a Similarity Transformation Approach and Beyond. Wang, Y., +, TAC Nov. 2020 4632-4647

Quantum theory

Quantum State Filter With Disturbance and Noise. Zhang, J., +, TAC July 2020 2856-2866

R

Radial basis function networks

RBFNN-Based Minimum Entropy Filtering for a Class of Stochastic Nonlinear Systems. Yin, X., +, TAC Jan. 2020 376-381

Radio receivers

Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907

Radio transmitters

Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907

Random noise

Consensus of Multi-Agent Systems Under Binary-Valued Measurements and Recursive Projection Algorithm. *Wang, T.*, +, *TAC June 2020 2678-2685*

Random processes

- Distributed Multiagent Convex Optimization Over Random Digraphs. Alaviani, S.S., +, TAC March 2020 986-998
- MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels. *Cai, S., +, TAC May 2020 2046-2061*
- Push-Sum on Random Graphs: Almost Sure Convergence and Convergence Rate. *Rezaienia*, P., +, *TAC March 2020 1295-1302*

5586

Random sequences

Lyapunov Criterion for Stochastic Systems and Its Applications in Distributed Computation. *Qin, Y.*, +, *TAC Feb. 2020 546-560*

Rate distortion theory

- Metric and Topological Entropy Bounds for Optimal Coding of Stochastic Dynamical Systems. *Kawan, C.*, +, *TAC June 2020 2466-2479*
- The Time-Invariant Multidimensional Gaussian Sequential Rate-Distortion Problem Revisited. *Stavrou, P.A.*, +, *TAC May 2020 2245-2249*

Rational functions

On Algebraic Proofs of Stability for Homogeneous Vector Fields. *Ahmadi, A.A.*, +, *TAC Jan. 2020 325-332*

Reachability analysis

- Abstraction-Based Safety Verification and Control of Cooperative Vehicles at Road Intersections. *Ahn, H., +, TAC Oct. 2020 4061-4074*
- Computing Optimal Control of Cascading Failure in DC Networks. *Ba*, *Q*., +, *TAC June 2020 2402-2417*
- Efficient Liveness Assessment for Traffic States in Open, Irreversible, Dynamically Routed, Zone-Controlled Guidepath-Based Transport Systems. *Reveliotis*, S., +, *TAC July 2020 2883-2898*
- Inner-Approximating Reachable Sets for Polynomial Systems With Time-Varying Uncertainties. *Xue, B., +, TAC April 2020 1468-1483*
- Notions of Centralized and Decentralized Opacity in Linear Systems. Ramasubramanian, B., +, TAC April 2020 1442-1455
- Reachability Analysis of Large Linear Systems With Uncertain Inputs in the Krylov Subspace. *Althoff, M., TAC Feb. 2020* 477-492
- Realization of Reachability for the Control of a Class of Nonlinear Systems. Chai, Y, +, TAC March 2020 1073-1088
- Scheduling Multiple Agents in a Persistent Monitoring Task Using Reachability Analysis. Yu, X., +, TAC April 2020 1499-1513
- Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. *Qi, W.*, +, *TAC Jan. 2020 361-368*

Real-time systems

Supervisor Localization of Timed Discrete-Event Systems Under Partial Observation. Zhang, R., +, TAC Jan. 2020 295-301

Recurrent neural networks

Varying-Parameter Convergent-Differential Neural Solution to Time-Varying Overdetermined System of Linear Equations. *Zhang, Z.*, +, *TAC Feb.* 2020 874-881

Recursive estimation

- A Set-Membership Approach to Event-Triggered Filtering for General Nonlinear Systems Over Sensor Networks. *Ding, D.*, +, *TAC April 2020 1792-1799*
- Consensus of Multi-Agent Systems Under Binary-Valued Measurements and Recursive Projection Algorithm. *Wang, T.*, +, *TAC June 2020 2678-2685*

Reduced order systems

- H₂ Model Reduction of Linear Network Systems by Moment Matching and Optimization. *Necoara*, *1.*, +, *TAC Dec. 2020 5328-5335*
- Clustering-Based Model Reduction of Laplacian Dynamics With Weakly Connected Topology. *Cheng*, X., +, *TAC Oct.* 2020 4393-4399
- Compositional (In)Finite Abstractions for Large-Scale Interconnected Stochastic Systems. *Lavaei*, A., +, TAC Dec. 2020 5280-5295
- Data-Driven Model Reduction of Monotone Systems by Nonlinear DC Gains. Kawano, Y., +, TAC May 2020 2094-2106
- Global Analysis of Synchronization Performance for Power Systems: Bridging the Theory-Practice Gap. Paganini, F., +, TAC July 2020 3007-3022
- Model Reduction of Markovian Jump Systems With Uncertain Probabilities. Shen, Y., +, TAC Jan. 2020 382-388
- New Gramians for Switched Linear Systems: Reachability, Observability, and Model Reduction. *Pontes Duff, I.*, +, *TAC June 2020 2526-2535*
- Proper Orthogonal Decomposition Method to Nonlinear Filtering Problems in Medium-High Dimension. *Wang*, Z., +, *TAC April 2020 1613-1624*
- Reduced Order Controller Design for Robust Output Regulation. *Paunonen*, L., +, *TAC June 2020 2480-2493*

Reduced-Order H_{∞} Filter Design for Delta Operator Systems Over Multiple Frequency Intervals. Yang, H., +, TAC Dec. 2020 5376-5383

Reduced-Order Observer Design for Boolean Control Networks. Zhang, Z., +, TAC Jan. 2020 434-441

Reduced-Order Observer Design for Switched Descriptor Systems With Unknown Inputs. Zhang, J., +, TAC Jan. 2020 287-294

Singularities and Moments of Nonlinear Systems. Padoan, A., +, TAC Aug. 2020 3647-3654

Regression analysis

Constrained Subspace Method for the Identification of Structured State-Space Models (COSMOS). Yu, C., +, TAC Oct. 2020 4201-4214

Identification of Linear Models From Quantized Data: A Midpoint-Projection Approach. *Risuleo, R.S.*, +, *TAC July 2020 2801-2813*

- On Robust Parameter Estimation in Finite-Time Without Persistence of Excitation. Wang, J., +, TAC April 2020 1731-1738
- SI-ADMM: A Stochastic Inexact ADMM Framework for Stochastic Convex Programs. Xie, Y., +, TAC June 2020 2355-2370

Reinforcement learning

Finding the Equilibrium for Continuous Constrained Markov Games Under the Average Criteria. *Jiang, X., +, TAC Dec. 2020 5399-5406*

Relay networks (telecommunication)

Optimizing Attack Schedules Based on Energy Dispatch Over Two-Hop Relay Networks. *Gan, R., +, TAC Sept. 2020 3832-3846*

Remotely operated vehicles

Behavior of *n*Infinite Chains of Kinematic Points With the Immediate-Neighbors Interaction Dynamics. *Athalye, C.D.,* +, *TAC July 2020 2929-2940*

Resistors

Minimal Series–Parallel Network Realizations of Bicubic Impedances. Hughes, T.H., TAC Dec. 2020 4997-5011

Resource allocation

- Distributed Mechanism Design With Learning Guarantees for Private and Public Goods Problems. *Sinha, A.,* +, *TAC Oct. 2020 4106-4121*
- Dynamic Sharing Through the ADMM. Cao, X., +, TAC May 2020 2215-2222
- Efficient Simulation Budget Allocation With Bound Information. Li, H., +, TAC Jan. 2020 207-222
- Input–Output Performance of Linear–Quadratic Saddle-Point Algorithms With Application to Distributed Resource Allocation Problems. *Simpson-Porco, J.W.*, +, *TAC May 2020 2032-2045*
- Utility Design for Distributed Resource Allocation—Part I: Characterizing and Optimizing the Exact Price of Anarchy. *Paccagnan, D.*, +, *TAC Nov.* 2020 4616-4631

Riccati equations

- A Suboptimality Approach to Distributed Linear Quadratic Optimal Control. *Jiao, J.*, +, *TAC March 2020 1218-1225*
- An H_i/H_∞ Optimization Approach to Event-Triggered Fault Detection for Linear Discrete Time Systems. Zhong, M., +, TAC Oct. 2020 4464-4471

Chandrasekhar-Based Maximum Correntropy Kalman Filtering With the Adaptive Kernel Size Selection. *Kulikova, M.V., TAC Feb. 2020* 741-748

- Combining Pontryagin's Principle and Dynamic Programming for Linear and Nonlinear Systems. Sassano, M., +, TAC Dec. 2020 5312-5327
- Control of Continuous-Time Linear Systems With Markov Jump Parameters in Reverse Time. *Narvaez, A.R.R.*, +, *TAC May 2020 2265-2271*
- Disturbance Attenuation by Measurement Feedback in Nonlinear Systems via Immersion and Algebraic Conditions. *Mylvaganam, T., +, TAC Feb. 2020 854-860*
- Feedback Nash Equilibrium for Randomly Switching Differential-Algebraic Games. *Tanwani*, A., +, *TAC Aug. 2020 3286-3301*
- Linear Quadratic Mean Field Games: Asymptotic Solvability and Relation to the Fixed Point Approach. *Huang, M., +, TAC April 2020 1397-1412*
- Minimum-Energy Distributed Consensus Control of Multiagent Systems: A Network Approximation Approach. *Chen, F., +, TAC March 2020 1144-1159*
- On the Existence of Block-Diagonal Solutions to Lyapunov and \mathcal{H}_{∞} Riccati Inequalities. *Sootla*, A., +, *TAC July 2020 3170-3175*
- On the Existence of the Stabilizing Solution of a Class of Periodic Stochastic Riccati Equations. *Aberkane*, S., +, *TAC March 2020 1288-1294*
- Robust Optimal Filtering Over Lossy Networks. Feng, Y., +, TAC May 2020 2272-2277

Road safety

Abstraction-Based Safety Verification and Control of Cooperative Vehicles at Road Intersections. *Ahn, H.,* +, *TAC Oct. 2020 4061-4074*

Road traffic control

- Efficient Liveness Assessment for Traffic States in Open, Irreversible, Dynamically Routed, Zone-Controlled Guidepath-Based Transport Systems. *Reveliotis, S.*, +, *TAC July 2020 2883-2898*
- On the Chain Stability of Bilateral Control Model. Wang, L., +, TAC Aug. 2020 3397-3408
- On the Stability Analysis of Mixed Traffic With Vehicles Under Car-Following and Bilateral Control. *Wang, L., +, TAC July 2020 3076-3083*
- Polling-Systems-Based Autonomous Vehicle Coordination in Traffic Intersections With No Traffic Signals. *Miculescu, D.*, +, *TAC Feb. 2020 680-694*

Road vehicles

- Abstraction-Based Safety Verification and Control of Cooperative Vehicles at Road Intersections. *Ahn, H., +, TAC Oct. 2020 4061-4074*
- Polling-Systems-Based Autonomous Vehicle Coordination in Traffic Intersections With No Traffic Signals. *Miculescu, D.*, +, *TAC Feb. 2020 680-694*
- Risk of Collision and Detachment in Vehicle Platooning: Time-Delay– Induced Limitations and Tradeoffs. *Somarakis, C.*, +, *TAC Aug. 2020* 3544-3559

Robust control

- A Decentralized Event-Based Approach for Robust Model Predictive Control. *Kolarijani, A.S.*, +, *TAC Aug. 2020 3517-3529*
- A Lyapunov-Like Characterization of Predefined-Time Stability. Jimenez-Rodriguez, E., +, TAC Nov. 2020 4922-4927
- A Note on Uniform Exponential Stability of Linear Periodic Time-Varying Systems. Vrabel, R., TAC April 2020 1647-1651
- A Robust Asymptotic Observer for Systems That Converge to Unobservable States—A Batch Reactor Case Study. *Rapaport, A.*, +, *TAC June 2020* 2693-2699
- Actuator Security Indices Based on Perfect Undetectability: Computation, Robustness, and Sensor Placement. *Milosevic, J.*, +, *TAC Sept. 2020 3816-3831*
- An Integrative Perspective to LQ and ℓ_{∞} Control for Delayed and Quantized Systems. *Nakahira, Y.*, +, *TAC Nov. 2020 4781-4792*
- Analysis and Design of Continuous-Time Multivariable Periodic Controllers: An \mathcal{H}_{∞} /LTR-Based Approach. *Deshmukh*, A., +, TAC Aug. 2020 3608-3615
- Cascades-Based Leader–Follower Formation Tracking and Stabilization of Multiple Nonholonomic Vehicles. *Maghenem, M.A.*, +, *TAC Aug. 2020* 3639-3646
- Codesign of Event Trigger and Feedback Policy in Robust Model Predictive Control. *Liu*, *C.*, +, *TAC Jan. 2020 302-309*
- Continuous Twisting Algorithm for Third-Order Systems. *Mendoza-Avila*, J., +, *TAC July 2020 2814-2825*
- Correction to the Paper "A Robust IDA-PBC Approach for Handling Uncertainties in Underactuated Mechanical Systems" [Oct 18 3495-3502]. Donaire, A., +, TAC July 2020 3223-3226
- Delay-Tolerant Adaptive Robust Tracking Control of Uncertain Time-Delay Systems. Nandiganahalli, J.S., +, TAC Feb. 2020 695-710
- Discrete-Time Implementation of Homogeneous Differentiators. Koch, S., +, TAC Feb. 2020 757-762
- Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads. *Kim, H.,* +, *TAC Nov. 2020 4887-4894*
- Event-Triggered Control for Semiglobal Robust Consensus of a Class of Nonlinear Uncertain Multiagent Systems. *Meng, H.*, +, *TAC April 2020* 1683-1690
- Feedback Nash Equilibrium for Randomly Switching Differential-Algebraic Games. *Tanwani*, A., +, *TAC Aug. 2020 3286-3301*
- Formulas for Data-Driven Control: Stabilization, Optimality, and Robustness. De Persis, C., +, TAC March 2020 909-924
- Geometric Programming for Optimal Positive Linear Systems. Ogura, M., +, TAC Nov. 2020 4648-4663
- Global Analysis of Synchronization Performance for Power Systems: Bridging the Theory-Practice Gap. Paganini, F., +, TAC July 2020 3007-3022

Hybrid Control for Robust and Global Tracking on Smooth Manifolds. Casau, P., +, TAC May 2020 1870-1885

- Hybrid Systems With Delayed Jumps: Asymptotic Stability via Robustness and Lyapunov Conditions. *Altin, B., +, TAC Aug. 2020 3381-3396*
- Leader-Following Attitude Consensus of Multiple Rigid Spacecraft Systems Under Switching Networks. Lu, M., +, TAC Feb. 2020 839-845
- Necessary and Sufficient Conditions on Negative Imaginariness for Interval SISO Transfer Functions and Their Interconnection. *Liu*, *M.*, +, *TAC Oct.* 2020 4362-4368
- Nonlinearity Estimator-Based Control of A Class of Uncertain Nonlinear Systems. *Yang, J.*, +, *TAC May 2020 2230-2236*
- Observer-Based Robust Controller Design With Simultaneous Optimization of Scaling Matrices. Sato, M., TAC Feb. 2020 861-866
- On Robust Parameter Estimation in Finite-Time Without Persistence of Excitation. *Wang, J.*, +,

TAC April 2020 1731-1738

- On Structured Lyapunov Functions and Dissipativity in Interconnected LTI Systems. Jokic, A., +, TAC March 2020 970-985
- Opacity Enforcement for Confidential Robust Control in Linear Cyber-Physical Systems. An, L., +, TAC March 2020 1234-1241
- Optimal Secure Control With Linear Temporal Logic Constraints. Niu, L., +, TAC June 2020 2434-2449
- Performance Output Tracking for Multidimensional Heat Equation Subject to Unmatched Disturbance and Noncollocated Control. *Zhou, H.*, +, *TAC May 2020 1940-1955*
- Periodic Event-Triggered Control for Nonlinear Networked Control Systems. Wang, W., +, TAC Feb. 2020 620-635
- Quasi-Polynomial-Based Robust Stability of Time-Delay Systems Can be Less Conservative Than Lyapunov–Krasovskii Approaches. Angulo, S., +, TAC July 2020 3164-3169
- Reduced Order Controller Design for Robust Output Regulation. *Paunonen*, L., +, *TAC June 2020 2480-2493*
- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, D., +, *TAC May 2020 2300-2307*
- Robust Cooperative Output Regulation of Heterogeneous Uncertain Linear Multiagent Systems With Time-Varying Communication Topologies. *Wang, L.*, +, *TAC Oct. 2020 4340-4347*
- Robust Motion Planning for Uncertain Systems With Disturbances Using the Invariant-Set Motion Planner. Danielson, C., +, TAC Oct. 2020 4456-4463
- Robust Optimal Filtering Over Lossy Networks. *Feng, Y.*, +, *TAC May 2020* 2272-2277
- Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs. *Deutscher, J., +, TAC May 2020 2207-2214*
- Stabilization of Two-Port Networked Systems With Simultaneous Uncertainties in Plant, Controller, and Communication Channels. Zhao, D., +, TAC March 2020 1160-1175

Switched Systems With Multiple Equilibria Under Disturbances: Boundedness and Practical Stability. Veer, S., +, TAC June 2020 2371-2386

Robustness

Safety

A New Varying-Gain-Exponent-Based Differentiator/Observer: An Efficient Balance Between Linear and Sliding-Mode Algorithms. *Ghanes, M.*, +, *TAC Dec. 2020 5407-5414*

p-Safe Analysis of Stochastic Hybrid Processes. Wisniewski, R., +, TAC Dec. 2020 5220-5235

S

Sampled data systems

- Continuous-Time and Sampled-Data Stabilizers for Nonlinear Systems With Input and Measurement Delays. *Battilotti, S., TAC April 2020 1568-1583*
- Continuous-Time Model Identification From Filtered Sampled Data: Error Analysis. *Hu*, *X*., +, *TAC Oct. 2020 4005-4015*
- Discrete-Time Implementation of Homogeneous Differentiators. Koch, S., +, TAC Feb. 2020 757-762
- Event-Triggered Design With Guaranteed Minimum Interevent Times and \mathcal{L}_p Performance. *Ghodrat*, M., +, *TAC April 2020 1668-1675*
- Koopman-Based Lifting Techniques for Nonlinear Systems Identification. Mauroy, A., +, TAC June 2020 2550-2565

Leader-Following Consensus for Linear Multiagent Systems via Asynchronous Sampled-Data Control. *Liu*, *W.*, +, *TAC July 2020 3215-3222*

- Lebesgue-Approximation Model Predictive Control of Nonlinear Sampled-Data Systems. *Tao, J.*, +, *TAC Oct. 2020 4047-4060*
- Periodic Event-Triggered Control for Nonlinear Networked Control Systems. Wang, W., +, TAC Feb. 2020 620-635
- Preserving and Achieving Passivity-Short Property Through Discretization. Joo, Y., +, TAC Oct. 2020 4265-4272
- Set-Valued Feedback Control and Its Application to Event-Triggered Sampled-Data Systems. *Jiang, Y.*, +, *TAC Nov. 2020 4965-4972*
- When Is a Nonlinear System Semiglobally Asymptotically Stabilizable by Digital Feedback?. *Lin, W., TAC Nov. 2020 4584-4599*

Sampling methods

- Continuous Discrete Sequential Observers for Time-Varying Systems Under Sampling and Input Delays. *Mazenc, F*, +, *TAC April 2020 1704-1709*
- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. *Komaee, A., TAC May 2020 1969-1984*

Scheduling

- An Event-Based Stealthy Attack on Remote State Estimation. Cheng, P., +, TAC Oct. 2020 4348-4355
- Distributed Event-Triggered Gradient Method for Constrained Convex Minimization. Liu, C., +, TAC Feb. 2020 778-785
- Remote State Estimation With Stochastic Event-Triggered Sensor Schedule and Packet Drops. Xu, L., +, TAC Nov. 2020 4981-4988
- Scheduling Multiple Agents in a Persistent Monitoring Task Using Reachability Analysis. Yu, X., +, TAC April 2020 1499-1513
- Sensitivity to Cumulative Perturbations for a Class of Piecewise Constant Hybrid Systems. *Sharifnassab, A., +, TAC March 2020 1057-1072*
- Tracking Control of Nonlinear Networked and Quantized Control Systems With Communication Delays. *Ren, W.*, +, *TAC Aug. 2020 3685-3692*

Schrodinger equation

- Exponential Stability of a Schrödinger Equation Through Boundary Coupling a Wave Equation. *Wang, J.*, +, *TAC July 2020 3136-3142*
- Output Feedback Stabilization for a Class of First-Order Equation Setting of Collocated Well-Posed Linear Systems With Time Delay in Observation. *Guo, B.*, +, *TAC June 2020 2612-2618*

Search problems

- Constrained Search via Penalization for Continuous Simulation Optimization. Hu, L., +, TAC Nov. 2020 4741-4752
- Convex Searches for Discrete-Time Zames–Falb Multipliers. *Carrasco, J.*, +, *TAC Nov. 2020 4538-4553*

Security

A Game-Theoretic Approach for Dynamic Information Flow Tracking to Detect Multistage Advanced Persistent Threats. *Moothedath, S.*, +, *TAC Dec.* 2020 5248-5263

Security of data

- A Distributed Cyber-Attack Detection Scheme With Application to DC Microgrids. *Gallo, A.J.*, +, *TAC Sept. 2020 3800-3815*
- An Event-Based Stealthy Attack on Remote State Estimation. Cheng, P., +, TAC Oct. 2020 4348-4355
- Detection of Covert Cyber-Attacks in Interconnected Systems: A Distributed Model-Based Approach. *Barboni, A., +, TAC Sept. 2020 3728-3741*
- Finite-Time Guarantees for Byzantine-Resilient Distributed State Estimation With Noisy Measurements. Su, L., +, TAC Sept. 2020 3758-3771
- Learning-Based Event-Triggered Control for Synchronization of Passive Multiagent Systems Under Attack. Rahnama, A., +, TAC Oct. 2020 4170-4185
- On the Performance Analysis of Reset Attack in Cyber-Physical Systems. *Ni*, *Y*., +, *TAC Jan. 2020 419-425*
- Opacity Enforcement for Confidential Robust Control in Linear Cyber-Physical Systems. An, L., +, TAC March 2020 1234-1241
- Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. Wu, G., +, TAC Sept. 2020 3919-3926
- Resilient Distributed Optimization Algorithm Against Adversarial Attacks. *Zhao, C., +, TAC Oct. 2020 4308-4315*

Robustness of Interdependent Cyber-Physical Systems Against Cascading Failures. Zhang, Y., +, TAC Feb. 2020 711-726 Secure State Estimation for Multiagent Systems With Faulty and Malicious Agents. *Lu*, *A.*, +, *TAC Aug. 2020 3471-3485*

Sensor fusion

- An Optimal Data Fusion Algorithm in the Presence of Unknown Cross Covariances. Zhang, X., TAC March 2020 1226-1233
- Distributed Kalman Filters With State Equality Constraints: Time-Based and Event-Triggered Communications. *He*, *X*., +, *TAC Jan. 2020 28-43*
- MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels. *Cai, S.*, +, *TAC May 2020 2046-*2061
- Quaternion-Valued Distributed Filtering and Control. Talebi, S.P., +, TAC Oct. 2020 4246-4257
- Secure State Estimation With Byzantine Sensors: A Probabilistic Approach. *Ren, X.*, +, *TAC Sept. 2020 3742-3757*

Sensor placement

Actuator Security Indices Based on Perfect Undetectability: Computation, Robustness, and Sensor Placement. *Milosevic*, J., +, *TAC Sept. 2020 3816-3831*

Sensors

- A Moving Target Defense Control Framework for Cyber-Physical Systems. Kanellopoulos, A., +, TAC March 2020 1029-1043
- Design of Supervisors for Active Diagnosis in Discrete Event Systems. *Hu*, *Y*, +, *TAC Dec. 2020 5159-5172*
- Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907

Servomechanisms

- Adaptive Error Feedback Regulator Design for One-Dimensional Heat Equation With Unknown Harmonic Disturbance Anticollocated With Control. *Guo*, *W*., +, *TAC Feb. 2020 824-830*
- Performance Output Tracking for Multidimensional Heat Equation Subject to Unmatched Disturbance and Noncollocated Control. *Zhou, H.*, +, *TAC May 2020 1940-1955*

Set theory

- A Set-Membership Approach to Event-Triggered Filtering for General Nonlinear Systems Over Sensor Networks. *Ding, D.*, +, *TAC April 2020 1792-1799*
- Analysis of Stochastic Approximation Schemes With Set-Valued Maps in the Absence of a Stability Guarantee and Their Stabilization. *Yaji, V.G.*, +, *TAC March 2020 1100-1115*
- Computation of Admissible Marking Sets in Weighted Synchronization-Free Petri Nets by Dynamic Programming. *Ma*, *Z*., +, *TAC June 2020 2662-2669*
- Decentralized Goal Assignment and Safe Trajectory Generation in Multirobot Networks via Multiple Lyapunov Functions. *Panagou, D.*, +, *TAC Aug. 2020 3365-3380*
- Distributed Model Predictive Control for Linear Systems With Adaptive Terminal Sets. Darivianakis, G., +, TAC March 2020 1044-1056
- Distributed Multiagent Convex Optimization Over Random Digraphs. Alaviani, S.S., +, TAC March 2020 986-998
- Finite-Time Distributed Linear Equation Solver for Solutions With Minimum *l*₁-Norm. *Zhou*, *J*., +, *TAC April 2020 1691-1696*
- Inner-Approximating Reachable Sets for Polynomial Systems With Time-Varying Uncertainties. *Xue, B., +, TAC April 2020 1468-1483*
- Interval Consensus for Multiagent Networks. Fontan, A., +, TAC May 2020 1855-1869
- Notions of Centralized and Decentralized Opacity in Linear Systems. Ramasubramanian, B., +, TAC April 2020 1442-1455
- Online Distributed Optimization With Strongly Pseudoconvex-Sum Cost Functions. Lu, K., +, TAC Jan. 2020 426-433
- Output Admissible Sets and Reference Governors: Saturations Are Not Constraints!. Cotorruelo, A., +, TAC March 2020 1192-1196
- Output Tracking of Boolean Control Networks. Zhang, X., +, TAC June 2020 2730-2735
- Resilient Distributed Optimization Algorithm Against Adversarial Attacks. *Zhao, C., +, TAC Oct. 2020 4308-4315*
- Resilient Leader-Follower Consensus to Arbitrary Reference Values in Time-Varying Graphs. Usevitch, J., +, TAC April 2020 1755-1762

Robust Motion Planning for Uncertain Systems With Disturbances Using the Invariant-Set Motion Planner. *Danielson, C.,* +, *TAC Oct. 2020 4456-4463*

Secure State Estimation With Byzantine Sensors: A Probabilistic Approach. *Ren, X., +, TAC Sept. 2020 3742-3757*

Set-Valued Feedback Control and Its Application to Event-Triggered Sampled-Data Systems. *Jiang, Y.*, +, *TAC Nov. 2020 4965-4972*

Stochastic Control Approach to Reputation Games. *Dalkiran, N.A.*, +, *TAC Nov. 2020 4710-4725*

Shape control

Multiagent Flocking With Angle-Based Formation Shape Control. Jing, G., +, TAC Feb. 2020 817-823

Shock absorbers

Variational Integrators for Dissipative Systems. Limebeer, D.J.N., +, TAC April 2020 1381-1396

Signal detection

Centralized Versus Decentralized Detection of Attacks in Stochastic Interconnected Systems. Anguluri, R., +, TAC Sept. 2020 3903-3910

Signal generators

Distributed Finite-Time Optimization for Integrator Chain Multiagent Systems With Disturbances. *Wang, X., +, TAC Dec. 2020 5296-5311*

Signal processing

Barrier Function-Based Adaptive Super-Twisting Controller. Obeid, H., +, TAC Nov. 2020 4928-4933

- Distributed Stochastic Approximation Algorithm With Expanding Truncations. Lei, J., +, TAC Feb. 2020 664-679
- Signal Selection for Estimation and Identification in Networks of Dynamic Systems: A Graphical Model Approach. *Materassi, D.*, +, *TAC Oct. 2020* 4138-4153

Sine-Gordon equation

Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498

Sine-Gordon model

Output Feedback Energy Control of the Sine-Gordon PDE Model Using Collocated Spatially Sampled Sensing and Actuation. Orlov, Y., +, TAC April 2020 1484-1498

Single-input single-output systems (control)

Necessary and Sufficient Conditions on Negative Imaginariness for Interval SISO Transfer Functions and Their Interconnection. *Liu, M.*, +, *TAC Oct.* 2020 4362-4368

Singular value decomposition

MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels. Cai, S., +, TAC May 2020 2046-2061

Singularly perturbed systems

Passivity-Based Control for Hidden Markov Jump Systems With Singular Perturbations and Partially Unknown Probabilities. *Li*, *F*, +, *TAC Aug.* 2020 3701-3706

Singular Perturbation Analysis of a Coupled System Involving the Wave Equation. Cerpa, E., +, TAC Nov. 2020 4846-4853

Sliding mode control

Static Sliding Mode Control of Systems With Arbitrary Relative Degree by Using Artificial Delay. Xu, J., +, TAC Dec. 2020 5464-5471

Smart meters

Design of Privacy-Preserving Dynamic Controllers. Kawano, Y., +, TAC Sept. 2020 3863-3878

Smart power grids

Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. *Wu, G.*, +, *TAC Sept. 2020 3919-3926*

Smoothing methods

Reciprocal Chains: Foundations. Erhardsson, T., +, TAC Nov. 2020 4840-4845

State-Space Realizations and Optimal Smoothing for Gaussian Generalized Reciprocal Processes. White, L.B., +, TAC Jan. 2020 389-396

Social network theory

Consensus and Disagreement of Heterogeneous Belief Systems in Influence Networks. Ye, M., +, TAC Nov. 2020 4679-4694

Stability Theory of Stochastic Models in Opinion Dynamics. Askarzadeh, Z., +, TAC Feb. 2020 522-533

Social networking (online)

Interaction-Based Distributed Learning in Cyber-Physical and Social Networks. Sasso, F, +, TAC Jan. 2020 223-236

Social sciences

Consensus and Disagreement of Heterogeneous Belief Systems in Influence Networks. Ye, M., +, TAC Nov. 2020 4679-4694

Heterogeneous Hegselmann–Krause Dynamics With Environment and Communication Noise. Chen, G., +, TAC Aug. 2020 3409-3424

Solar power stations

On the Dynamics of Distributed Energy Adoption: Equilibrium, Stability, and Limiting Capacity. *Sun, T., +, TAC Jan. 2020 102-114*

Source coding

Metric and Topological Entropy Bounds for Optimal Coding of Stochastic Dynamical Systems. *Kawan, C.*, +, *TAC June 2020 2466-2479*

Space vehicles

- Leader-Following Attitude Consensus of Multiple Rigid Spacecraft Systems Under Switching Networks. Lu, M., +, TAC Feb. 2020 839-845
- Optimal Control of Endoatmospheric Launch Vehicle Systems: Geometric and Computational Issues. *Bonalli, R.*, +, *TAC June 2020 2418-2433*

Spacecraft Attitude Control With Nonconvex Constraints: An Explicit Reference Governor Approach. *Nicotra, M.M.*, +, *TAC Aug. 2020 3677-3684*

Special issues and sections

Guest Editorial: Special Issue on Security and Privacy of Distributed Algorithms and Network Systems. *Chen, Z.*, +, *TAC Sept. 2020 3725-3727*

Specification languages

Relative Network Observability and Its Relation With Network Observability. *Hou*, Y., +, *TAC Aug. 2020 3584-3591*

Spectral analysis

- Exponential Stability of a Schrödinger Equation Through Boundary Coupling a Wave Equation. *Wang, J.*, +, *TAC July 2020 3136-3142*
- On the Well-Posedness of a Parametric Spectral Estimation Problem and Its Numerical Solution. *Zhu, B., TAC March 2020 1089-1099*

Springs (mechanical)

- Principles of Lossless Adjustable One-Ports. Georgiou, T.T., +, TAC Jan. 2020 252-262
- Variational Integrators for Dissipative Systems. Limebeer, D.J.N., +, TAC April 2020 1381-1396

Stability

- A Complete Characterization of Integral Input-to-State Stability and Its Small-Gain Theorem for Stochastic Systems. *Ito, H., TAC July 2020 3039-3052*
- A Detector-Based Approach for the Constrained Quadratic Control of Discrete-Time Markovian Jump Linear Systems. Zabala, Y.A., +, TAC March 2020 1211-1217

A Dynamic Feedback Framework for Control of Time-Delay Nonlinear Systems With Unstable Zero Dynamics. *Lin, W.*, +, *TAC Aug. 2020 3317-3332*

- A Globally Stable Algorithm for the Integration of High-Index Differential-Algebraic Systems. *Franco, P.D.*, +, *TAC May 2020 2107-2122*
- A New Approach for Event-Triggered Stabilization and Output Regulation of Nonlinear Systems. *Khan, G.D.,* +, *TAC Aug. 2020 3592-3599*
- A Nonlinear Model Predictive Control Framework Using Reference Generic Terminal Ingredients. *Kohler, J.*, +, *TAC Aug. 2020 3576-3583*
- A Novel Method to Compute the Structured Distance to Instability for Combined Uncertainties on Delays and System Matrices. *Borgioli, F.*, +, *TAC April 2020 1747-1754*
- A Partial-State Feedback Model Reference Adaptive Control Scheme. Song, G., +, TAC Jan. 2020 44-57
- A Smooth Double Proximal Primal-Dual Algorithm for a Class of Distributed Nonsmooth Optimization Problems. *Wei, Y.*, +, *TAC April 2020 1800-1806*
- A Stabilization Framework for the Output Regulation of Rational Nonlinear Systems. *Castro, R.d.S.*, +, *TAC Nov. 2020 4860-4865*
- Adaptive Control for a Class of Multi-Input Multi-Output Plants With Arbitrary Relative Degree. *Qu, Z.*, +, *TAC July 2020 3023-3038*
- Adaptive Event-Triggered Control of Nonlinear Systems With Controller and Parameter Estimator Triggering. *Huang, J.*, +, *TAC Jan. 2020 318-324*
- Almost Sure Stability of Nonlinear Systems Under Random and Impulsive Sequential Attacks. *He, W.*, +, *TAC Sept. 2020 3879-3886*

- An Improved Homogeneous Polynomial Approach for Adaptive Sliding-Mode Control of Markov Jump Systems With Actuator Faults. Du, C., +, TAC March 2020 955-969
- Analysis of Stochastic Approximation Schemes With Set-Valued Maps in the Absence of a Stability Guarantee and Their Stabilization. *Yaji, V.G.*, +, *TAC March 2020 1100-1115*
- Analysis of Systems With Slope Restricted Nonlinearities Using Externally Positive Zames–Falb Multipliers. *Turner, M.C.*, +, *TAC April 2020 1660-1667*
- Analysis of Two-Dimensional Feedback Systems Over Networks Using Dissipativity. Yan, Y., +, TAC Aug. 2020 3241-3255
- Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty. *Zheng, X.*, +, *TAC March 2020 1310-1317*
- Consensus of Linear Multiagent Systems With Distributed Infinite Transmission Delays: A Low Gain Approach. Xu, X., +, TAC Feb. 2020 809-816
- Continuous Control for Fully Damped Mechanical Systems With Input Constraints: Finite-Time and Exponential Tracking. Zamora-Gomez, G.I., +, TAC Feb. 2020 882-889
- Continuous Discrete Sequential Observers for Time-Varying Systems Under Sampling and Input Delays. Mazenc, F., +, TAC April 2020 1704-1709
- Continuous Twisting Algorithm for Third-Order Systems. *Mendoza-Avila*, J., +, *TAC July 2020 2814-2825*
- Continuous-Time and Sampled-Data Stabilizers for Nonlinear Systems With Input and Measurement Delays. *Battilotti, S., TAC April 2020 1568-1583*

Convex Searches for Discrete-Time Zames–Falb Multipliers. Carrasco, J., +, TAC Nov. 2020 4538-4553

- Discrete-Time Systems With Constrained Time Delays and Delay-Dependent Lyapunov Functions. *Pepe, P., TAC April 2020 1724-1730*
- Dissipativity Properties of Nonlinear Systems Under Network Constraints. Ghodrat, M., +, TAC June 2020 2708-2715
- Distributed Consensus Observer for Multiagent Systems With High-Order Integrator Dynamics. Zuo, Z., +, TAC April 2020 1771-1778
- Distributed Consensus Over Markovian Packet Loss Channels. Xu, L., +, TAC Jan. 2020 279-286
- Distributed Model Predictive Control for Linear Systems With Adaptive Terminal Sets. Darivianakis, G., +, TAC March 2020 1044-1056
- Disturbance Attenuation by Measurement Feedback in Nonlinear Systems via Immersion and Algebraic Conditions. *Mylvaganam, T.*, +, *TAC Feb.* 2020 854-860
- Dynamic Modularity Approach to Adaptive Control of Robotic Systems With Closed Architecture. Wang, H., +, TAC June 2020 2760-2767
- Dynamical Systems With a Cyclic Sign Variation Diminishing Property. Ben Avraham, T., +, TAC March 2020 941-954
- Energy-to-Peak Filtering of Semi-Markov Jump Systems With Mismatched Modes. Xu, Z., +, TAC Oct. 2020 4356-4361
- Event-Triggered H_∞ Control of Networked Control Systems With Distributed Transmission Delay. Yan, S., +, TAC Oct. 2020 4295-4301
- Event-Triggered Bipartite Consensus for Multiagent Systems: A Zeno-Free Analysis. Yu, H., +, TAC Nov. 2020 4866-4873
- Event-Triggered Dynamic Output Feedback Control for Switched Systems With Frequent Asynchronism. *Fei, Z.,* +, *TAC July 2020 3120-3127*
- Feedback Nash Equilibrium for Randomly Switching Differential-Algebraic Games. *Tanwani*, A., +, *TAC Aug. 2020 3286-3301*
- Feedforward Boundary Control for the Regulation of a Passive and Diffusive Scalar in Two-Dimensional Unsteady Flows. *Liu, W., TAC Nov. 2020* 4882-4886
- Finite-Time Stability of Network Systems With Discontinuous Dynamics Over Signed Digraphs. *Shi*, X., +, *TAC Nov. 2020 4874-4881*
- Geometric Programming for Optimal Positive Linear Systems. Ogura, M., +, TAC Nov. 2020 4648-4663
- Higher Order Sliding Mode Control Using Discontinuous Integral Action. Cruz-Zavala, E., +, TAC Oct. 2020 4316-4323
- Input-to-State Stability of a Clamped-Free Damped String in the Presence of Distributed and Boundary Disturbances. *Lhachemi, H.*, +, *TAC March* 2020 1248-1255

- Input-to-State Stability of Time-Delay Systems With Delay-Dependent Impulses. *Liu*, *X*., +, *TAC April 2020 1676-1682*
- Integral Input-to-State Stability of Networked Control Systems. Noroozi, N., +, TAC March 2020 1203-1210
- Lebesgue-Approximation Model Predictive Control of Nonlinear Sampled-Data Systems. *Tao, J.*, +, *TAC Oct. 2020 4047-4060*
- Logic-Based Switching Control for Stabilization of Stochastic Feedforward Nonlinear Systems. Yu, M., TAC Oct. 2020 4408-4415
- Lyapunov Event-Triggered Stabilization With a Known Convergence Rate. *Proskurnikov, A.V.,* +, *TAC Feb. 2020 507-521*
- Lyapunov Stability Analysis of the Implicit Discrete-Time Twisting Control Algorithm. *Huber, O., +, TAC June 2020 2619-2626*
- Model Reduction of Markovian Jump Systems With Uncertain Probabilities. Shen, Y, +, TAC Jan. 2020 382-388
- Multivariable Extremum Seeking for PDE Dynamic Systems. *Oliveira, T.R.*, +, *TAC Nov. 2020 4949-4956*
- Necessary and Sufficient Bit Rate Conditions to Stabilize a Scalar Continuous-Time LTI System Based on Event Triggering. *Ling, Q., TAC April* 2020 1598-1612
- Necessary and Sufficient Conditions for 2pth Moment Stability of Several Classes of Linear Stochastic Systems. *Luo, S.*, +, *TAC July 2020 3084-3091*
- Necessary Stability Conditions for Integral Delay Systems. Ortiz, R., +, TAC Oct. 2020 4377-4384
- New Gramians for Switched Linear Systems: Reachability, Observability, and Model Reduction. *Pontes Duff, I.*, +, *TAC June 2020 2526-2535*
- Novel All-Pass Factorization, All Solutions to Rational Matrix Equation and Control Application. *Stefanovski*, J., *TAC July 2020 3176-3183*
- Observed-Mode-Dependent State Estimation of Hidden Semi-Markov Jump Linear Systems. *Cai, B.*, +, *TAC Jan. 2020 442-449*
- Observer Design For a Class of Parabolic Systems With Large Delays and Sampled Measurements. *Ahmed-Ali*, *T.*, +, *TAC May 2020 2200-2206*
- Observer Design for Nonlinear Networked Control Systems With Persistently Exciting Protocols. Maass, A.I., +, TAC July 2020 2992-3006
- On Convergence for Piecewise Affine Models of Gene Regulatory Networks via a Lyapunov Approach. *Pasquini, M.*, +, *TAC Aug. 2020 3333-3348*
- On Structured Lyapunov Functions and Dissipativity in Interconnected LTI Systems. Jokic, A., +, TAC March 2020 970-985
- On the Chain Stability of Bilateral Control Model. Wang, L., +, TAC Aug. 2020 3397-3408
- On the Event-Triggered Controller Design. Ghodrat, M., +, TAC Oct. 2020 4122-4137
- On the Existence and Design of Functional Observers. Darouach, M., +, TAC June 2020 2751-2759
- On the Existence of Block-Diagonal Solutions to Lyapunov and \mathcal{H}_{∞} Riccati Inequalities. *Sootla*, A., +, *TAC July 2020 3170-3175*
- On the Positive Effect of Delay on the Rate of Convergence of a Class of Linear Time-Delayed Systems. *Moradian, H.,* +, *TAC Nov. 2020 4832-4839*
- On the Stability Analysis of Mixed Traffic With Vehicles Under Car-Following and Bilateral Control. Wang, L., +, TAC July 2020 3076-3083
- On the Stability Bounds of Kalman Filters for Linear Deterministic Discrete-Time Systems. *Haring, M.*, +, *TAC Oct. 2020 4434-4439*
- Optimality and Passivity of Input-Quadratic Nonlinear Systems. Sassano, M., +, TAC Aug. 2020 3229-3240
- Output Feedback Stabilization for a Class of First-Order Equation Setting of Collocated Well-Posed Linear Systems With Time Delay in Observation. *Guo, B., +, TAC June 2020 2612-2618*
- Peaking Attenuation of High-Gain Observers Using Adaptive Techniques: State Estimation and Feedback Control. *Shakarami, M.*, +, *TAC Oct. 2020* 4215-4229
- Ratio-of-Distance Rigidity Theory With Application to Similar Formation Control. *Cao, K.*, +, *TAC June 2020 2598-2611*
- Realization of Reachability for the Control of a Class of Nonlinear Systems. Chai, Y, +, TAC March 2020 1073-1088
- Removing SPR-Like Conditions in Adaptive Feedforward Control of Uncertain Systems. Wang, Y., +, TAC June 2020 2309-2324

- Resilient Output Containment of Heterogeneous Cooperative and Adversarial Multigroup Systems. Zuo, S., +, TAC July 2020 3104-3111
- Secure and Private Implementation of Dynamic Controllers Using Semihomomorphic Encryption. *Murguia, C., +, TAC Sept. 2020 3950-3957*
- Self-Learning Optimal Regulation for Discrete-Time Nonlinear Systems Under Event-Driven Formulation. *Wang, D.*, +, *TAC March 2020 1272-1279*
- Semi-Markov Jump Linear Systems With Incomplete Sojourn and Transition Information: Analysis and Synthesis. Ning, Z., +, TAC Jan. 2020 159-174
- Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes. *Zhang, C.*, +, *TAC May* 2020 2185-2191
- Set-Valued Feedback Control and Its Application to Event-Triggered Sampled-Data Systems. *Jiang, Y.*, +, *TAC Nov. 2020 4965-4972*
- Spacecraft Attitude Control With Nonconvex Constraints: An Explicit Reference Governor Approach. Nicotra, M.M., +, TAC Aug. 2020 3677-3684
- Stability Analysis of Linear Coupled Differential-Difference Systems With General Distributed Delays. *Feng*, Q., +, *TAC March 2020 1356-1363*
- Stability Analysis of Linear Partial Differential Equations With Generalized Energy Functions. Gahlawat, A., +, TAC May 2020 1924-1939
- Stability and Stabilization Through Envelopes for Retarded and Neutral Time-Delay Systems. Cardeliquio, C.B., +, TAC April 2020 1640-1646
- Stabilization of a Class of Nonlinear Systems With Random Disturbance via Intermittent Stochastic Noise. *Zhang, B., +, TAC March 2020 1318-1324*
- Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907
- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984
- Stabilization of Networked Control Systems Under DoS Attacks and Output Quantization. Wakaiki, M., +, TAC Aug. 2020 3560-3575
- Stabilization of Nonlinear Dynamic Systems Over Limited Capacity Communication Channels. Sanjaroon, V., +, TAC Aug. 2020 3655-3662
- Stochastic Semistability for Nonlinear Dynamical Systems With Application to Consensus on Networks With Communication Uncertainty. *Haddad*, *W.M.*, +, *TAC July 2020 2826-2841*
- Structured Feedback Synthesis for Stability and Performance of Switched Systems. Chesi, G., +, TAC Nov. 2020 4695-4709
- Synthesizing Communication Plans for Reachability and Safety Specifications. Hashimoto, K., +, TAC Feb. 2020 561-576
- The Value of Timing Information in Event-Triggered Control. *Khojasteh*, M.J., +, TAC March 2020 925-940
- Toward a Comprehensive Impossibility Result for String Stability. *Farnam*, *A.*, +, *TAC April 2020 1652-1659*

Stability analysis

- *H*₂ Model Reduction of Linear Network Systems by Moment Matching and Optimization. *Necoara, I., +, TAC Dec. 2020 5328-5335*
- An Input–Output Approach to Structured Stochastic Uncertainty. *Bamieh*, B., +, *TAC Dec. 2020 5012-5027*
- Corrections to "Stochastic Stability of Perturbed Learning Automata in Positive-Utility Games" [Nov 19 4454-4469]. *Chasparis, G.C., TAC April* 2020 1822
- Global Stabilization of Uncertain Lotka–Volterra Systems via Positive Nonlinear State Feedback. *Badri, V.*, +, *TAC Dec. 2020 5450-5455*
- Robust Feedback Stabilization of Linear MIMO Systems Using Generalized Homogenization. Zimenko, K., +, TAC Dec. 2020 5429-5436
- Stability Analysis of Discrete-Time Semi-Markov Jump Linear Systems. Wang, B., +, TAC Dec. 2020 5415-5421
- Stabilization for Infinite-Dimensional Switched Linear Systems. Zheng, G., +, TAC Dec. 2020 5456-5463
- Synchronization of Kuramoto Oscillators: A Regional Stability Framework. *Zhu, L., +, TAC Dec. 2020 5070-5082*

Stability criteria

- Asymptotical Stability of Probabilistic Boolean Networks With State Delays. Zhu, S., +, TAC April 2020 1779-1784
- Mean-Square Exponential Stability for Stochastic Control Systems With Discrete-Time State Feedbacks and Their Numerical Schemes in Simulation. *Liu*, *L*., +, *TAC Dec. 2020 5384-5391*

- Stability Analysis of Discrete-Time Semi-Markov Jump Linear Systems. Wang, B., +, TAC Dec. 2020 5415-5421
- Stability-Preserving Morse Normal Form. Kucera, V., TAC Dec. 2020 5099-5113
- Stabilization of Two-Port Networked Systems With Simultaneous Uncertainties in Plant, Controller, and Communication Channels. *Zhao, D.*, +, *TAC March 2020 1160-1175*
- Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks. *Peng, C.*, +, *TAC Sept. 2020* 3943-3949
- Uniform Input-To-State Stability for Switched and Time-Varying Impulsive Systems. *Mancilla-Aguilar, J.L.*, +, *TAC Dec. 2020 5028-5042*

State estimation

- A New Varying-Gain-Exponent-Based Differentiator/Observer: An Efficient Balance Between Linear and Sliding-Mode Algorithms. *Ghanes, M.*, +, *TAC Dec. 2020 5407-5414*
- A Set-Membership Approach to Event-Triggered Filtering for General Nonlinear Systems Over Sensor Networks. *Ding, D.*, +, *TAC April 2020 1792-1799*
- An Adaptive Gaussian Sum Kalman Filter Based on a Partial Variational Bayesian Method. *Xu*, *H.*, +, *TAC Nov. 2020 4793-4799*
- Backstepping-Based Estimation of Thermoacoustic Oscillations in a Rijke Tube With Experimental Validation. *de Andrade, G.A.*, +, *TAC Dec. 2020* 5336-5343
- Distributed Kalman Filters With State Equality Constraints: Time-Based and Event-Triggered Communications. *He*, *X*., +, *TAC Jan. 2020 28-43*
- Kernel-Based Simultaneous Parameter-State Estimation for Continuous-Time Systems. Li, P., +, TAC July 2020 3053-3059
- Malicious Attacks on State Estimation Against Distributed Control Systems. Lu, A., +, TAC Sept. 2020 3911-3918
- Metric and Topological Entropy Bounds for Optimal Coding of Stochastic Dynamical Systems. *Kawan, C.*, +, *TAC June 2020 2466-2479*
- Moving Horizon Estimation With Unknown Inputs Under Dynamic Quantization Effects. Zou, L., +, TAC Dec. 2020 5368-5375
- MSE Tail Analysis for Remote State Estimation of Linear Systems Over Multiantenna Random Access Channels. *Cai, S.*, +, *TAC May 2020 2046-2061*
- On the Performance Analysis of Reset Attack in Cyber-Physical Systems. *Ni*, *Y*, +, *TAC Jan. 2020 419-425*
- Optimal Local and Remote Controllers With Unreliable Uplink Channels: An Elementary Proof. *Afshari*, M., +, *TAC Aug. 2020 3616-3622*
- Optimizing Attack Schedules Based on Energy Dispatch Over Two-Hop Relay Networks. *Gan, R.*, +, *TAC Sept. 2020 3832-3846*
- Peaking Attenuation of High-Gain Observers Using Adaptive Techniques: State Estimation and Feedback Control. *Shakarami, M.*, +, *TAC Oct. 2020* 4215-4229
- Remote State Estimation With Stochastic Event-Triggered Sensor Schedule and Packet Drops. Xu, L., +, TAC Nov. 2020 4981-4988
- Secure State Estimation With Byzantine Sensors: A Probabilistic Approach. *Ren, X.*, +, *TAC Sept. 2020 3742-3757*
- State Estimation for Stochastic Time-Varying Boolean Networks. Chen, H., +, TAC Dec. 2020 5480-5487
- State Observers for Systems Subject to Bounded Disturbances Using Quadratic Boundedness. *Alessandri, A.*, +, *TAC Dec. 2020 5352-5359*
- State-Secrecy Codes for Networked Linear Systems. *Tsiamis, A.*, +, *TAC May 2020 2001-2015*
- Uniting Observers. Astolfi, D., +, TAC July 2020 2867-2882
- Whittle Index Policy for Dynamic Multichannel Allocation in Remote State Estimation. *Wang, J.*, +, *TAC Feb. 2020 591-603*
- State feedback
 - A Dynamic Feedback Framework for Control of Time-Delay Nonlinear Systems With Unstable Zero Dynamics. *Lin, W.*, +, *TAC Aug. 2020 3317-3332*
 - A Partial-State Feedback Model Reference Adaptive Control Scheme. Song, G., +, TAC Jan. 2020 44-57
 - Adaptive State-Feedback Stabilization of Stochastic High-Order Nonlinear Systems With Time-Varying Powers and Stochastic Inverse Dynamics. *Li*, *G.*, +, *TAC Dec. 2020 5360-5367*

- Backstepping Control of Coupled Linear Parabolic PDEs With Space and Time Dependent Coefficients. *Kerschbaum, S.*, +, *TAC July 2020 3060-3067*
- Continuous Twisting Algorithm for Third-Order Systems. *Mendoza-Avila*, J., +, TAC July 2020 2814-2825
- Fredholm Backstepping Control of Coupled Linear Parabolic PDEs With Input and Output Delays. *Deutscher*, J., +, *TAC July 2020 3128-3135*
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*
- Global Stabilization of Uncertain Lotka–Volterra Systems via Positive Nonlinear State Feedback. *Badri, V.*, +, *TAC Dec. 2020 5450-5455*
- Leader-Following Consensus for Linear Multiagent Systems via Asynchronous Sampled-Data Control. Liu, W., +, TAC July 2020 3215-3222
- Mean-Square Exponential Stability for Stochastic Control Systems With Discrete-Time State Feedbacks and Their Numerical Schemes in Simulation. *Liu*, *L.*, +, *TAC Dec. 2020 5384-5391*
- Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints. *Zhu*, *Y*, +, *TAC May 2020 2177-2184*
- Observer-Based Robust Controller Design With Simultaneous Optimization of Scaling Matrices. Sato, M., TAC Feb. 2020 861-866
- On the Existence and Design of Functional Observers. Darouach, M., +, TAC June 2020 2751-2759
- Peaking Attenuation of High-Gain Observers Using Adaptive Techniques: State Estimation and Feedback Control. *Shakarami, M.*, +, *TAC Oct. 2020* 4215-4229
- Performance Recovery of Dynamic Feedback-Linearization Methods for Multivariable Nonlinear Systems. Wu, Y., +, TAC April 2020 1365-1380
- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, D., +, *TAC May 2020 2300-2307*
- Robust Cooperative Output Regulation of Heterogeneous Uncertain Linear Multiagent Systems With Time-Varying Communication Topologies. *Wang, L.*, +, *TAC Oct. 2020 4340-4347*
- Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs. *Deutscher, J., +, TAC May 2020 2207-2214*
- Set-Valued Feedback Control and Its Application to Event-Triggered Sampled-Data Systems. *Jiang, Y.*, +, *TAC Nov. 2020 4965-4972*
- Stability and Stabilization Through Envelopes for Retarded and Neutral Time-Delay Systems. Cardeliquio, C.B., +, TAC April 2020 1640-1646
- Stability-Preserving Morse Normal Form. Kucera, V., TAC Dec. 2020 5099-5113
- Stabilization of Networked Control Systems Under DoS Attacks and Output Quantization. Wakaiki, M., +, TAC Aug. 2020 3560-3575
- Stabilization of Switched Linear Systems Subject to Actuator Saturation via Invariant Semiellipsoids. *Lian, J.*, +, *TAC Oct. 2020 4332-4339*
- When Is a Nonlinear System Semiglobally Asymptotically Stabilizable by Digital Feedback?. *Lin, W., TAC Nov. 2020 4584-4599*

State-space methods

- A Complete Characterization of Integral Input-to-State Stability and Its Small-Gain Theorem for Stochastic Systems. *Ito, H., TAC July 2020 3039-3052*
- An Adaptive Gaussian Sum Kalman Filter Based on a Partial Variational Bayesian Method. Xu, H., +, TAC Nov. 2020 4793-4799
- An Approach to Improve Permissiveness of Supervisors for GMECs in Time Petri Net Systems. *Li, L., +, TAC Jan. 2020 237-251*
- Causality and Network Graph in General Bilinear State-Space Representations. Jozsa, M., +, TAC Aug. 2020 3623-3630
- Combining Linear Algebra and Numerical Optimization for Gray-Box Affine State-Space Model Identification. Prot, O., +, TAC Aug. 2020 3272-3285
- Constrained Subspace Method for the Identification of Structured State-Space Models (COSMOS). Yu, C., +, TAC Oct. 2020 4201-4214
- Integral Control of Stable Negative-Imaginary Systems Preceded by Hysteresis Nonlinearity. *Dey*, *A.*, +, *TAC March 2020 1333-1339*
- Novel Stealthy Attack and Defense Strategies for Networked Control Systems. Mao, Y., +, TAC Sept. 2020 3847-3862
- Observer-Based Robust Controller Design With Simultaneous Optimization of Scaling Matrices. Sato, M., TAC Feb. 2020 861-866

- On Local LTI Model Coherence for LPV Interpolation. Zhang, Q., +, TAC Aug. 2020 3671-3676
- On the Existence of Block-Diagonal Solutions to Lyapunov and \mathcal{H}_{∞} Riccati Inequalities. *Sootla*, A., +, *TAC July 2020 3170-3175*
- Positivity-Preserving Consensus of Homogeneous Multiagent Systems. *Liu*, *J.J.R.*, +, *TAC June 2020 2724-2729*
- Robust Motion Planning for Uncertain Systems With Disturbances Using the Invariant-Set Motion Planner. Danielson, C., +, TAC Oct. 2020 4456-4463
- State-Space Realizations and Optimal Smoothing for Gaussian Generalized Reciprocal Processes. *White, L.B.*, +, *TAC Jan. 2020 389-396*
- Structuring Multilevel Discrete-Event Systems With Dependence Structure Matrices. Goorden, M., +, TAC April 2020 1625-1639
- UD-Based Pairwise and MIMO Kalman-Like Filtering for Estimation of Econometric Model Structures. *Kulikova, M.V.*, +, *TAC Oct. 2020 4472-*4479
- Unbiased FIR Filtering for Time-Stamped Discretely Delayed and Missing Data. Uribe-Murcia, K.J., +, TAC May 2020 2155-2162
- Well-Posedness of Boundary Controlled and Observed Stochastic Port-Hamiltonian Systems. *Lamoline, F., +, TAC Oct. 2020 4258-4264*

Statistical analysis

- Blind Learning of Tree Network Topologies in the Presence of Hidden Nodes. Sepehr, F., +, TAC March 2020 1014-1028
- Competitive Statistical Estimation With Strategic Data Sources. Westenbroek, T., +, TAC April 2020 1537-1551
- Proximal Algorithms for Large-Scale Statistical Modeling and Sensor/Actuator Selection. Zare, A., +, TAC Aug. 2020 3441-3456

Statistical distributions

- Cooperative Data-Driven Distributionally Robust Optimization. *Cherukuri*, *A.*, +, *TAC Oct. 2020 4400-4407*
- Distributed Coupled Multiagent Stochastic Optimization. Alghunaim, S.A., +, TAC Jan. 2020 175-190

Steady-state

Output Feedback Approximation-Free Prescribed Performance Tracking Control for Uncertain MIMO Nonlinear Systems. *Dimanidis, I.S.*, +, *TAC Dec. 2020 5058-5069*

Stochastic games

- Efficient Strategy Computation in Zero-Sum Asymmetric Information Repeated Games. Li, L., +, TAC July 2020 2785-2800
- Optimal Secure Control With Linear Temporal Logic Constraints. Niu, L., +, TAC June 2020 2434-2449

Stochastic processes

- p-Safe Analysis of Stochastic Hybrid Processes. Wisniewski, R., +, TAC Dec. 2020 5220-5235
- A Complete Characterization of Integral Input-to-State Stability and Its Small-Gain Theorem for Stochastic Systems. *Ito, H., TAC July 2020 3039-3052*
- A Forgetting Property of Reciprocal Chains. Bruce-Doust, R., +, TAC Nov. 2020 4854-4859
- A Moving Target Defense Control Framework for Cyber-Physical Systems. Kanellopoulos, A., +, TAC March 2020 1029-1043
- Almost Sure Stability of Nonlinear Systems Under Random and Impulsive Sequential Attacks. *He, W.*, +, *TAC Sept. 2020 3879-3886*
- An Input–Output Approach to Structured Stochastic Uncertainty. *Bamieh*, *B.*, +, *TAC Dec. 2020 5012-5027*
- An Integrative Perspective to LQ and ℓ_∞ Control for Delayed and Quantized Systems. *Nakahira, Y*, +, *TAC Nov. 2020 4781-4792*
- An Iterative Learning Control Algorithm With Gain Adaptation for Stochastic Systems. Shen, D., +, TAC March 2020 1280-1287
- Analysis of Stochastic Approximation Schemes With Set-Valued Maps in the Absence of a Stability Guarantee and Their Stabilization. *Yaji, V.G.*, +, *TAC March 2020 1100-1115*
- Centralized Versus Decentralized Detection of Attacks in Stochastic Interconnected Systems. *Anguluri*, *R.*, +, *TAC Sept. 2020 3903-3910*
- Collective Stochastic Discrete Choice Problems: A Min-LQG Dynamic Game Formulation. *Salhab, R., +, TAC Aug. 2020 3302-3316*
- Constrained Search via Penalization for Continuous Simulation Optimization. *Hu, L., +, TAC Nov. 2020 4741-4752*

- Cooperative Data-Driven Distributionally Robust Optimization. *Cherukuri*, *A.*, +, *TAC Oct. 2020 4400-4407*
- Corrections to "Model Predictive Control for Stochastic Max-Plus Linear Systems With Chance Constraints,". *Boom, T.J.J.v.d.*, +, *TAC Feb. 2020* 905-906
- Corrections to "Stochastic Stability of Perturbed Learning Automata in Positive-Utility Games" [Nov 19 4454-4469]. *Chasparis, G.C., TAC April* 2020 1822
- Decentralized Optimization Over Time-Varying Directed Graphs With Row and Column-Stochastic Matrices. *Saadatniaki*, F., +, *TAC Nov. 2020 4769-4780*
- Design of a Quantum Projection Filter. Gao, Q., +, TAC Aug. 2020 3693-3700
- Distributed Coupled Multiagent Stochastic Optimization. Alghunaim, S.A., +, TAC Jan. 2020 175-190
- Distributed Heavy-Ball: A Generalization and Acceleration of First-Order Methods With Gradient Tracking. Xin, R., +, TAC June 2020 2627-2633
- Distributed Stochastic Approximation Algorithm With Expanding Truncations. Lei, J., +, TAC Feb. 2020 664-679
- Energy-Efficient Time-Triggered Communication Policies for Wireless Networked Control Systems. Varma, V.S., +, TAC Oct. 2020 4324-4331
- Gradient Flow Algorithms for Density Propagation in Stochastic Systems. Caluya, K.F., +, TAC Oct. 2020 3991-4004
- Heterogeneous Hegselmann–Krause Dynamics With Environment and Communication Noise. Chen, G., +, TAC Aug. 2020 3409-3424
- Leader–Follower Network Aggregative Game With Stochastic Agents' Communication and Activeness. Shokri, M., +, TAC Dec. 2020 5496-5502
- Local Controllability of Single-Input Nonlinear Systems Based on Deterministic Wiener Processes. Nishimura, Y., +, TAC Jan. 2020 354-360
- Lyapunov Criterion for Stochastic Systems and Its Applications in Distributed Computation. *Qin*, *Y*, +, *TAC Feb. 2020 546-560*
- Mean Field Games With Parametrized Followers. *Bensoussan, A.*, +, *TAC Jan. 2020 12-27*
- Metric and Topological Entropy Bounds for Optimal Coding of Stochastic Dynamical Systems. *Kawan, C.*, +, *TAC June 2020 2466-2479*
- Necessary and Sufficient Conditions for 2pth Moment Stability of Several Classes of Linear Stochastic Systems. *Luo, S., +, TAC July 2020 3084-3091*
- On the Existence of the Stabilizing Solution of a Class of Periodic Stochastic Riccati Equations. *Aberkane, S.*, +, *TAC March 2020 1288-1294*
- On the LQG Game With Nonclassical Information Pattern Using a Direct Solution Method. *Clemens, J.W.*, +, *TAC May 2020 2078-2093*
- On the Use of Supervised Clustering in Stochastic NMPC Design. *Alamir,* M., TAC Dec. 2020 5392-5398
- Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401
- Optimal Continuous-Discrete Linear Filter and Moment Equations for Nonlinear Diffusions. Cacace, F., +, TAC Oct. 2020 3961-3976
- Polling-Systems-Based Autonomous Vehicle Coordination in Traffic Intersections With No Traffic Signals. *Miculescu, D.*, +, *TAC Feb. 2020 680-694*
- Proper Orthogonal Decomposition Method to Nonlinear Filtering Problems in Medium-High Dimension. *Wang*, Z., +, *TAC April 2020 1613-1624*
- Protocol-Based Unscented Kalman Filtering in the Presence of Stochastic Uncertainties. *Liu, S.,* +, *TAC March 2020 1303-1309*
- Proximal Algorithms for Large-Scale Statistical Modeling and Sensor/Actuator Selection. Zare, A., +, TAC Aug. 2020 3441-3456
- Random Directions Stochastic Approximation With Deterministic Perturbations. Prashanth, L.A., +, TAC June 2020 2450-2465
- Randomized Gradient-Free Distributed Optimization Methods for a Multiagent System With Unknown Cost Function. *Pang, Y.*, +, *TAC Jan. 2020* 333-340
- Reciprocal Chains: Foundations. Erhardsson, T., +, TAC Nov. 2020 4840-4845
- Remote State Estimation With Stochastic Event-Triggered Sensor Schedule and Packet Drops. Xu, L., +, TAC Nov. 2020 4981-4988

- Risk of Collision and Detachment in Vehicle Platooning: Time-Delay– Induced Limitations and Tradeoffs. *Somarakis, C.*, +, *TAC Aug. 2020* 3544-3559
- Robust Economic Model Predictive Control of Continuous-Time Epidemic Processes. *Watkins*, *N.J.*, +, *TAC March 2020 1116-1131*
- SI-ADMM: A Stochastic Inexact ADMM Framework for Stochastic Convex Programs. Xie, Y., +, TAC June 2020 2355-2370
- Smooth Interpolation of Covariance Matrices and Brain Network Estimation: Part II. Ning, L., TAC May 2020 1901-1910
- Stabilization of a Class of Nonlinear Systems With Random Disturbance via Intermittent Stochastic Noise. *Zhang, B., +, TAC March 2020 1318-1324*
- Stabilization of Highly Nonlinear Hybrid Systems by Feedback Control Based on Discrete-Time State Observations. *Fei, C.*, +, *TAC July 2020* 2899-2912
- State Estimation for Stochastic Time-Varying Boolean Networks. Chen, H., +, TAC Dec. 2020 5480-5487
- State-Space Realizations and Optimal Smoothing for Gaussian Generalized Reciprocal Processes. *White, L.B.,* +, *TAC Jan. 2020 389-396*
- Stealthy Actuator Signal Attacks in Stochastic Control Systems: Performance and Limitations. Fang, C., +, TAC Sept. 2020 3927-3934
- Stochastic Artificial Potentials for Online Safe Navigation. Paternain, S., +, TAC May 2020 1985-2000
- Stochastic Control and Nonequilibrium Thermodynamics: Fundamental Limits. Chen, Y., +, TAC July 2020 2979-2991
- Stochastic Control Framework for Determining Feasible Alternatives in Sampling Allocation. *Peng, Y., +, TAC June 2020 2647-2653*
- Stochastic Control of Multidimensional Systems With Relative Optimization. Cao, X., TAC May 2020 1886-1900
- Well-Posedness of Boundary Controlled and Observed Stochastic Port-Ham-
- iltonian Systems. *Lamoline, F.,* +, *TAC Oct. 2020 4258-4264* Stochastic programming
 - SI-ADMM: A Stochastic Inexact ADMM Framework for Stochastic Convex Programs. Xie, Y., +, TAC June 2020 2355-2370

Stochastic systems

- A Complete Characterization of Integral Input-to-State Stability and Its Small-Gain Theorem for Stochastic Systems. *Ito, H., TAC July 2020 3039-3052*
- A Detector-Based Approach for the Constrained Quadratic Control of Discrete-Time Markovian Jump Linear Systems. *Zabala, Y.A.*, +,

TAC March 2020 1211-1217

- A Simple Proof of Indefinite Linear-Quadratic Stochastic Optimal Control With Random Coefficients. *Moon, J.*, +, *TAC Dec. 2020 5422-5428*
- A Topology for Team Policies and Existence of Optimal Team Policies in Stochastic Team Theory. Saldi, N., TAC Jan. 2020 310-317
- Adaptive State-Feedback Stabilization of Stochastic High-Order Nonlinear Systems With Time-Varying Powers and Stochastic Inverse Dynamics. *Li*, *G.*, +, *TAC Dec. 2020 5360-5367*
- An Improved Homogeneous Polynomial Approach for Adaptive Sliding-Mode Control of Markov Jump Systems With Actuator Faults. Du, C., +, TAC March 2020 955-969
- An Iterative Learning Control Algorithm With Gain Adaptation for Stochastic Systems. Shen, D., +, TAC March 2020 1280-1287
- Asymptotic Optimality of Finite Model Approximations for Partially Observed Markov Decision Processes With Discounted Cost. Saldi, N., +, TAC Jan. 2020 130-142
- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
- Compositional (In)Finite Abstractions for Large-Scale Interconnected Stochastic Systems. *Lavaei*, A., +, *TAC Dec. 2020 5280-5295*
- Control of Continuous-Time Linear Systems With Markov Jump Parameters in Reverse Time. *Narvaez, A.R.R.*, +, *TAC May 2020 2265-2271*
- Energy-to-Peak Filtering of Semi-Markov Jump Systems With Mismatched Modes. Xu, Z., +, TAC Oct. 2020 4356-4361
- Equilibrium Solutions of Multiperiod Mean-Variance Portfolio Selection. Ni, Y., +, TAC April 2020 1716-1723
- Event-Triggered Stabilization for Continuous-Time Stochastic Systems. *Li*, *F*, +, *TAC Oct. 2020 4031-4046*

- Explicit Iterative Algorithms for Continuous Coupled Lyapunov Matrix Equations. *Sun, H.*, +, *TAC Aug. 2020 3631-3638*
- Finite-Time Sliding-Mode Control of Markovian Jump Cyber-Physical Systems Against Randomly Occurring Injection Attacks. Cao, Z., +, TAC March 2020 1264-1271
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*
- Gradient Flow Algorithms for Density Propagation in Stochastic Systems. Caluya, K.F., +, TAC Oct. 2020 3991-4004
- Hybrid Systems With State-Triggered Jumps: Sensitivity-Based Stability Analysis With Application to Trajectory Tracking. *Rijnen, M.*, +, *TAC Nov.* 2020 4568-4583
- Logic-Based Switching Control for Stabilization of Stochastic Feedforward Nonlinear Systems. Yu, M., TAC Oct. 2020 4408-4415
- Lyapunov Criterion for Stochastic Systems and Its Applications in Distributed Computation. *Qin*, *Y*, +, *TAC Feb. 2020 546-560*
- Mean Field Games With Parametrized Followers. *Bensoussan, A.*, +, *TAC Jan. 2020 12-27*
- Mean-Square Exponential Stability for Stochastic Control Systems With Discrete-Time State Feedbacks and Their Numerical Schemes in Simulation. *Liu*, *L.*, +, *TAC Dec. 2020 5384-5391*
- Metric and Topological Entropy Bounds for Optimal Coding of Stochastic Dynamical Systems. *Kawan, C.*, +, *TAC June 2020 2466-2479*
- Model Reduction of Markovian Jump Systems With Uncertain Probabilities. Shen, Y, +, TAC Jan. 2020 382-388
- Near Optimality of Linear Strategies for Static Teams With "Big" Non-Gaussian Noise. Kulkarni, A.A., TAC Feb. 2020 534-545
- Necessary and Sufficient Conditions for 2pth Moment Stability of Several Classes of Linear Stochastic Systems. *Luo, S.*, +, *TAC July 2020 3084-3091*
- Observed-Mode-Dependent State Estimation of Hidden Semi-Markov Jump Linear Systems. Cai, B., +, TAC Jan. 2020 442-449
- On Event-Triggered Control of Nonlinear Stochastic Systems. Luo, S., +, TAC Jan. 2020 369-375
- Optimal Continuous-Discrete Linear Filter and Moment Equations for Nonlinear Diffusions. *Cacace, F*, +, *TAC Oct. 2020 3961-3976*
- Proximal Algorithms for Large-Scale Statistical Modeling and Sensor/Actuator Selection. Zare, A., +, TAC Aug. 2020 3441-3456
- RBFNN-Based Minimum Entropy Filtering for a Class of Stochastic Nonlinear Systems. Yin, X., +, TAC Jan. 2020 376-381
- Semi-Markov Jump Linear Systems With Incomplete Sojourn and Transition Information: Analysis and Synthesis. Ning, Z., +, TAC Jan. 2020 159-174
- Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. *Qi, W.*, +, *TAC Jan. 2020 361-368*
- Stealthy Actuator Signal Attacks in Stochastic Control Systems: Performance and Limitations. Fang, C., +, TAC Sept. 2020 3927-3934
- Stochastic Control and Nonequilibrium Thermodynamics: Fundamental Limits. Chen, Y, +, TAC July 2020 2979-2991
- Stochastic Control Framework for Determining Feasible Alternatives in Sampling Allocation. *Peng, Y., +, TAC June 2020 2647-2653*
- Stochastic Semistability for Nonlinear Dynamical Systems With Application to Consensus on Networks With Communication Uncertainty. *Haddad*, *W.M.*, +, *TAC July 2020 2826-2841*
- The Time-Invariant Multidimensional Gaussian Sequential Rate-Distortion Problem Revisited. *Stavrou, P.A.*, +, *TAC May 2020 2245-2249*
- Well-Posedness of Boundary Controlled and Observed Stochastic Port-Hamiltonian Systems. Lamoline, F., +, TAC Oct. 2020 4258-4264
- Stock markets
 - On Positive Solutions of a Delay Equation Arising When Trading in Financial Markets. *Hsieh, C.*, +, *TAC July 2020 3143-3149*

Suboptimal control

- A Suboptimality Approach to Distributed Linear Quadratic Optimal Control. Jiao, J., +, TAC March 2020 1218-1225
- Control-Oriented Learning on the Fly. Ornik, M., +, TAC Nov. 2020 4800-4807

Supervisory control

- Control of Nondeterministic Systems for Bisimulation Equivalence Under Partial Information. *Farhat, H., TAC Dec. 2020 5437-5443*
- On Liveness Enforcing Supervisory Policies for Arbitrary Petri Nets. *Chen, C.*, +, *TAC Dec. 2020 5236-5247*

Surveillance

Markov Chains With Maximum Return Time Entropy for Robotic Surveillance. *Duan, X.*, +, *TAC Jan. 2020 72-86*

Switched systems

- Stabilization for Infinite-Dimensional Switched Linear Systems. Zheng, G., +, TAC Dec. 2020 5456-5463
- Uniform Input-To-State Stability for Switched and Time-Varying Impulsive Systems. *Mancilla-Aguilar, J.L.*, +, *TAC Dec. 2020 5028-5042*

Switching frequency

Stabilization for Infinite-Dimensional Switched Linear Systems. Zheng, G., +, TAC Dec. 2020 5456-5463

Switching systems

On Synchronization of Dynamical Systems Over Directed Switching Topologies: An Algebraic and Geometric Perspective. *Qin, J.*, +, *TAC Dec. 2020* 5083-5098

Switching systems (control)

- A Common Framework for Complete and Incomplete Attitude Synchronization in Networks With Switching Topology. *Pereira*, *P.O.*, +, *TAC Jan.* 2020 271-278
- A Switching Controller for a Class of MIMO Bilinear Systems With Time Delay. *Sanchez, T.,* +, *TAC May 2020 2250-2256*
- Almost Global Stability of Nonlinear Switched Systems With Time-Dependent Switching. Karabacak, O., +, TAC July 2020 2969-2978
- Critical Observability for Automata and Petri Nets. *Masopust, T., TAC Jan.* 2020 341-346
- Delayed and Switched Control of Formations on a Line Segment: Delays and Switches Do Not Matter. *Aleksandrov, A.*, +, *TAC Feb. 2020 794-800*

Detectability and Uniform Global Asymptotic Stability in Switched Nonlinear Time-Varying Systems. *Lee, T.*, +, *TAC May 2020 2123-2138*

- Discrete-Time Sliding-Mode Control With a Desired Switching Variable Generator. *Bartoszewicz, A., +, TAC April 2020 1807-1814*
- Event-Triggered Dynamic Output Feedback Control for Switched Systems With Frequent Asynchronism. *Fei, Z.,* +, *TAC July 2020 3120-3127*
- Leader-Following Attitude Consensus of Multiple Rigid Spacecraft Systems Under Switching Networks. *Lu*, *M*., +, *TAC Feb. 2020 839-845*
- Leader-Following Consensus for a Class of Multiple Robot Manipulators over Switching Networks by Distributed Position Feedback Control. *He*, *C*., +, *TAC Feb. 2020 890-896*
- Optimal Partial Feedback Attacks in Cyber-Physical Power Systems. Wu, G., +, TAC Sept. 2020 3919-3926
- Quantized Nonstationary Filtering of Networked Markov Switching RSNSs: A Multiple Hierarchical Structure Strategy. *Cheng, J.*, +, *TAC Nov. 2020* 4816-4823
- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984
- Structural Controller for Logical Expression of Linear Constraints on Petri Nets. *Luo*, J., +, *TAC Jan. 2020 397-403*
- Structured Feedback Synthesis for Stability and Performance of Switched Systems. Chesi, G., +, TAC Nov. 2020 4695-4709
- Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks. *Peng, C.*, +, *TAC Sept. 2020* 3943-3949

Symmetric matrices

- A Simple Proof of Indefinite Linear-Quadratic Stochastic Optimal Control With Random Coefficients. *Moon, J.*, +, *TAC Dec. 2020 5422-5428*
- Combining Pontryagin's Principle and Dynamic Programming for Linear and Nonlinear Systems. Sassano, M., +, TAC Dec. 2020 5312-5327
- Learning Latent Variable Dynamic Graphical Models by Confidence Sets Selection. *Ciccone, V.*, +, *TAC Dec. 2020 5130-5143*
- Static Sliding Mode Control of Systems With Arbitrary Relative Degree by Using Artificial Delay. Xu, J., +, TAC Dec. 2020 5464-5471

Synchronization

- A Common Framework for Complete and Incomplete Attitude Synchronization in Networks With Switching Topology. *Pereira*, *P.O.*, +, *TAC Jan*. 2020 271-278
- An Attack-Resilient Pulse-Based Synchronization Strategy for General Connected Topologies. Wang, Z., +, TAC Sept. 2020 3784-3799
- Global Analysis of Synchronization Performance for Power Systems: Bridging the Theory-Practice Gap. Paganini, F, +, TAC July 2020 3007-3022
- Leaderless Synchronization of Heterogeneous Oscillators by Adaptively Learning the Group Model. *Baldi, S.*, +, *TAC Jan. 2020 412-418*
- Learning-Based Event-Triggered Control for Synchronization of Passive Multiagent Systems Under Attack. Rahnama, A., +, TAC Oct. 2020 4170-4185
- On Synchronization of Dynamical Systems Over Directed Switching Topologies: An Algebraic and Geometric Perspective. *Qin, J.*, +, *TAC Dec. 2020* 5083-5098
- Synchronization of Kuramoto Oscillators: A Regional Stability Framework. Zhu, L., +, TAC Dec. 2020 5070-5082

Synchronous generators

Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads. *Kim, H., +, TAC Nov. 2020 4887-4894*

Synchronous motors

Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes. *Zhang, C.*, +, *TAC May* 2020 2185-2191

System identification

Set Membership Identification of Linear Systems With Guaranteed Simulation Accuracy. *Lauricella*, M., +, *TAC Dec.* 2020 5189-5204

Systems of systems

Parametric Optimization Based MPC for Systems of Systems With Affine Coordination Constraints. Novoselnik, B., +, TAC Feb. 2020 649-663

Т

Tariffs

On the Dynamics of Distributed Energy Adoption: Equilibrium, Stability, and Limiting Capacity. Sun, T., +, TAC Jan. 2020 102-114

Telecommunication computing

Blind Learning of Tree Network Topologies in the Presence of Hidden Nodes. Sepehr, F., +, TAC March 2020 1014-1028

Telecommunication control

- Energy-Efficient Time-Triggered Communication Policies for Wireless Networked Control Systems. Varma, V.S., +, TAC Oct. 2020 4324-4331
- Novel Stealthy Attack and Defense Strategies for Networked Control Systems. Mao, Y., +, TAC Sept. 2020 3847-3862
- Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907
- Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks. *Peng, C.*, +, *TAC Sept. 2020* 3943-3949

Telecommunication network routing

Uncertainty in Multicommodity Routing Networks: When Does It Help?. Sekar, S., +, TAC Nov. 2020 4600-4615

Telecommunication network topology

- A Topology for Team Policies and Existence of Optimal Team Policies in Stochastic Team Theory. Saldi, N., TAC Jan. 2020 310-317
- An Attack-Resilient Pulse-Based Synchronization Strategy for General Connected Topologies. Wang, Z., +, TAC Sept. 2020 3784-3799
- Blind Learning of Tree Network Topologies in the Presence of Hidden Nodes. Sepehr, F., +, TAC March 2020 1014-1028
- Novel Stealthy Attack and Defense Strategies for Networked Control Systems. Mao, Y., +, TAC Sept. 2020 3847-3862
- Privacy-Preserving Distributed Averaging via Homomorphically Encrypted Ratio Consensus. *Hadjicostis, C.N.*, +, *TAC Sept. 2020 3887-3894*

Telecommunication power management

Energy-Efficient Time-Triggered Communication Policies for Wireless Networked Control Systems. Varma, V.S., +, TAC Oct. 2020 4324-4331

Telecommunication scheduling

Optimizing Attack Schedules Based on Energy Dispatch Over Two-Hop Relay Networks. *Gan, R., +, TAC Sept. 2020 3832-3846*

Telecommunication security

- An Attack-Resilient Pulse-Based Synchronization Strategy for General Connected Topologies. *Wang, Z.*, +, *TAC Sept. 2020 3784-3799*
- Malicious Attacks on State Estimation Against Distributed Control Systems. Lu, A., +, TAC Sept. 2020 3911-3918

Switching-Like Event-Triggered Control for Networked Control Systems Under Malicious Denial of Service Attacks. *Peng, C.*, +, *TAC Sept. 2020* 3943-3949

Telecommunication switching

Novel Stealthy Attack and Defense Strategies for Networked Control Systems. *Mao, Y.*, +, *TAC Sept. 2020 3847-3862*

Telecontrol

Optimal Local and Remote Controllers With Unreliable Uplink Channels: An Elementary Proof. *Afshari*, *M.*, +, *TAC Aug. 2020 3616-3622*

Temporal logic

- Auditor Product and Controller Synthesis for Nondeterministic Transition Systems With Practical LTL Specifications. *Zibaeenejad, M.H.*, +, *TAC Oct.* 2020 4281-4287
- Entropy Maximization for Markov Decision Processes Under Temporal Logic Constraints. Savas, Y., +, TAC April 2020 1552-1567
- Optimal Secure Control With Linear Temporal Logic Constraints. Niu, L., +, TAC June 2020 2434-2449

Tensors

- Asymptotical Stability of Probabilistic Boolean Networks With State Delays. Zhu, S., +, TAC April 2020 1779-1784
- Reduced-Order Observer Design for Boolean Control Networks. Zhang, Z., +, TAC Jan. 2020 434-441

Thermodynamics

Variational Integrators for Dissipative Systems. Limebeer, D.J.N., +, TAC April 2020 1381-1396

Three-term control

Dynamic Modularity Approach to Adaptive Control of Robotic Systems With Closed Architecture. *Wang, H.,*+, *TAC June 2020 2760-2767*

Time optimal control

Sub-Riemannian Geodesics in *SU(n/S(U(n-1 × U(1))*) and Optimal Control of Three Level Quantum Systems. *Albertini, F., +, TAC March 2020 1176-1191*

Time-domain analysis

*H*₂ Model Reduction of Linear Network Systems by Moment Matching and Optimization. *Necoara*, *I.*, +, *TAC Dec. 2020 5328-5335*

Time-domain synthesis

Feedforward Boundary Control for the Regulation of a Passive and Diffusive Scalar in Two-Dimensional Unsteady Flows. *Liu, W., TAC Nov. 2020* 4882-4886

Time-varying networks

Smooth Interpolation of Covariance Matrices and Brain Network Estimation: Part II. Ning, L., TAC May 2020 1901-1910

Time-varying systems

- A Lyapunov-Like Characterization of Predefined-Time Stability. Jimenez-Rodriguez, E., +, TAC Nov. 2020 4922-4927
- A Note on Uniform Exponential Stability of Linear Periodic Time-Varying Systems. Vrabel, R., TAC April 2020 1647-1651
- Adaptive State-Feedback Stabilization of Stochastic High-Order Nonlinear Systems With Time-Varying Powers and Stochastic Inverse Dynamics. *Li*, *G.*, +, *TAC Dec. 2020 5360-5367*
- Adding Integral Action for Open-Loop Exponentially Stable Semigroups and Application to Boundary Control of PDE Systems. *Terrand-Jeanne*, *A.*, +, *TAC Nov. 2020 4481-4492*
- An Explicit Reference Governor for the Intersection of Concave Constraints. Hosseinzadeh, M., +, TAC Jan. 2020 1-11
- Asymptotic Stability Analysis of Discrete-Time Switched Cascade Nonlinear Systems With Delays. *Liu*, *X.*, +, *TAC June 2020 2686-2692*
- Asymptotical Stability of Probabilistic Boolean Networks With State Delays. Zhu, S., +, TAC April 2020 1779-1784

- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
- Cascades-Based Leader–Follower Formation Tracking and Stabilization of Multiple Nonholonomic Vehicles. *Maghenem, M.A.*, +, *TAC Aug. 2020* 3639-3646
- Cascading With Inner Systems: Hankel Singular Values and Characteristic Values. *Buscarino, A.,* +, *TAC Feb. 2020 727-732*
- Continuous Control for Fully Damped Mechanical Systems With Input Constraints: Finite-Time and Exponential Tracking. Zamora-Gomez, G.I., +, TAC Feb. 2020 882-889
- Continuous Discrete Sequential Observers for Time-Varying Systems Under Sampling and Input Delays. Mazenc, F., +, TAC April 2020 1704-1709
- Continuous-Time and Sampled-Data Stabilizers for Nonlinear Systems With Input and Measurement Delays. *Battilotti, S., TAC April 2020 1568-1583*
- Contraction Analysis of Monotone Systems via Separable Functions. Kawano, Y., +, TAC Aug. 2020 3486-3501
- Control of Continuous-Time Linear Systems With Markov Jump Parameters in Reverse Time. Narvaez, A.R.R., +, TAC May 2020 2265-2271
- Delay-Tolerant Adaptive Robust Tracking Control of Uncertain Time-Delay Systems. Nandiganahalli, J.S., +, TAC Feb. 2020 695-710
- Design Procedure for Linear Unknown Input Functional Observers. Sakhraoui, I., +, TAC Feb. 2020 831-838
- Discrete-Time Systems With Constrained Time Delays and Delay-Dependent Lyapunov Functions. *Pepe, P., TAC April 2020 1724-1730*
- Distributed Consensus Over Markovian Packet Loss Channels. Xu, L., +, TAC Jan. 2020 279-286
- Distributed Time-Varying Convex Optimization for a Class of Nonlinear Multiagent Systems. *Huang, B., +, TAC Feb. 2020 801-808*
- Dual Averaging Push for Distributed Convex Optimization Over Time-Varying Directed Graph. Liang, S., +, TAC April 2020 1785-1791
- Dynamic Sharing Through the ADMM. Cao, X., +, TAC May 2020 2215-2222
- Dynamical Systems With a Cyclic Sign Variation Diminishing Property. *Ben Avraham, T.*, +, *TAC March 2020 941-954*
- Fixed-Time Leader-Following Consensus for High-Order Time-Varying Nonlinear Multiagent Systems. You, X., +, TAC Dec. 2020 5510-5516
- Graphon Control of Large-Scale Networks of Linear Systems. Gao, S., +, TAC Oct. 2020 4090-4105
- Hybrid Systems With Delayed Jumps: Asymptotic Stability via Robustness and Lyapunov Conditions. *Altin, B., +, TAC Aug. 2020 3381-3396*
- Inner-Approximating Reachable Sets for Polynomial Systems With Time-Varying Uncertainties. *Xue, B., +, TAC April 2020 1468-1483*
- Lyapunov Stability for Impulsive Systems via Event-Triggered Impulsive Control. Li, X., +, TAC Nov. 2020 4908-4913
- Multiple Lyapunov Functions Analysis Approach for Discrete-Time-Switched Piecewise-Affine Systems Under Dwell-Time Constraints. *Zhu*, *Y*, +, *TAC May 2020 2177-2184*
- New Gramians for Switched Linear Systems: Reachability, Observability, and Model Reduction. *Pontes Duff, I.*, +, *TAC June 2020 2526-2535*
- Nonanticipating Lyapunov Functions for Persistently Excited Nonlinear Systems. Verrelli, C.M., +, TAC June 2020 2634-2639
- Observer-Based Control for Cyber-Physical Systems With Periodic DoS Attacks via a Cyclic Switching Strategy. *Zhu, Y.*, +, *TAC Aug. 2020 3714-3721*
- On Boundedness of Error Covariances for Kalman Consensus Filtering Problems. Li, W., +, TAC June 2020 2654-2661
- On Structured Lyapunov Functions and Dissipativity in Interconnected LTI Systems. Jokic, A., +, TAC March 2020 970-985
- Online Stochastic Optimization of Networked Distributed Energy Resources. Zhou, X., +, TAC June 2020 2387-2401
- Push-Sum on Random Graphs: Almost Sure Convergence and Convergence Rate. Rezaienia, P., +, TAC March 2020 1295-1302
- Reachability Analysis of Large Linear Systems With Uncertain Inputs in the Krylov Subspace. *Althoff, M., TAC Feb. 2020* 477-492
- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, D., +, *TAC May 2020 2300-2307*

- Resilient Leader-Follower Consensus to Arbitrary Reference Values in Time-Varying Graphs. Usevitch, J., +, TAC April 2020 1755-1762
- Robust Cooperative Output Regulation of Heterogeneous Uncertain Linear Multiagent Systems With Time-Varying Communication Topologies. *Wang, L.*, +, *TAC Oct. 2020 4340-4347*
- Set-Valued Feedback Control and Its Application to Event-Triggered Sampled-Data Systems. *Jiang, Y.*, +, *TAC Nov. 2020 4965-4972*
- Stability and Stabilization of Infinite Delay Systems: A Lyapunov-Based Approach. Xu, X., +, TAC Nov. 2020 4509-4524
- Stabilization of Linear Systems Across a Time-Varying AWGN Fading Channel. Su, L., +, TAC Nov. 2020 4902-4907
- Stabilization of Switched Linear Systems Subject to Actuator Saturation via Invariant Semiellipsoids. *Lian, J.*, +, *TAC Oct. 2020 4332-4339*
- Switched Systems With Multiple Equilibria Under Disturbances: Boundedness and Practical Stability. Veer, S., +, TAC June 2020 2371-2386
- Toward a Comprehensive Impossibility Result for String Stability. *Farnam,* A., +, *TAC April 2020 1652-1659*
- Tracking Control of Nonlinear Networked and Quantized Control Systems With Communication Delays. *Ren, W.*, +, *TAC Aug. 2020 3685-3692*
- Uniform Input-To-State Stability for Switched and Time-Varying Impulsive Systems. *Mancilla-Aguilar, J.L.*, +, *TAC Dec. 2020 5028-5042*
- Varying-Parameter Convergent-Differential Neural Solution to Time-Varying Overdetermined System of Linear Equations. Zhang, Z., +, TAC Feb. 2020 874-881
- Well-Posedness of Time-Varying Linear Systems. Kurula, M., TAC Oct. 2020 4075-4089

Topology

- A Common Framework for Complete and Incomplete Attitude Synchronization in Networks With Switching Topology. *Pereira, P.O.*, +, *TAC Jan.* 2020 271-278
- Clustering-Based Model Reduction of Laplacian Dynamics With Weakly Connected Topology. *Cheng*, *X*., +, *TAC Oct. 2020 4393-4399*
- Distributed Consensus Observer for Multiagent Systems With High-Order Integrator Dynamics. Zuo, Z., +, TAC April 2020 1771-1778
- Robust Cooperative Output Regulation of Heterogeneous Uncertain Linear Multiagent Systems With Time-Varying Communication Topologies. *Wang, L.*, +, *TAC Oct. 2020 4340-4347*

Torque control

- Dynamic Modularity Approach to Adaptive Control of Robotic Systems With Closed Architecture. *Wang, H.,* +, *TAC June 2020 2760-2767*
- Tracking
 - Adaptive Error Feedback Regulator Design for One-Dimensional Heat Equation With Unknown Harmonic Disturbance Anticollocated With Control. *Guo*, *W*., +, *TAC Feb. 2020 824-830*
 - Continuous Control for Fully Damped Mechanical Systems With Input Constraints: Finite-Time and Exponential Tracking. Zamora-Gomez, G.I., +, TAC Feb. 2020 882-889
 - Design of Privacy-Preserving Dynamic Controllers. Kawano, Y., +, TAC Sept. 2020 3863-3878
 - Hybrid Systems With State-Triggered Jumps: Sensitivity-Based Stability Analysis With Application to Trajectory Tracking. *Rijnen, M.*, +, *TAC Nov.* 2020 4568-4583
 - Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes. Zhang, C., +, TAC May 2020 2185-2191

Trajectory

Uniform Input-To-State Stability for Switched and Time-Varying Impulsive Systems. *Mancilla-Aguilar, J.L.*, +, *TAC Dec. 2020 5028-5042*

Trajectory control

- A Robust Asymptotic Observer for Systems That Converge to Unobservable States—A Batch Reactor Case Study. *Rapaport, A.*, +, *TAC June 2020* 2693-2699
- Cascades-Based Leader–Follower Formation Tracking and Stabilization of Multiple Nonholonomic Vehicles. *Maghenem, M.A.*, +, *TAC Aug. 2020* 3639-3646
- Decentralized Goal Assignment and Safe Trajectory Generation in Multirobot Networks via Multiple Lyapunov Functions. *Panagou, D.*, +, *TAC Aug. 2020 3365-3380*

- Dynamic Attitude Planning for Trajectory Tracking in Thrust-Vectoring UAVs. Invernizzi, D., +, TAC Jan. 2020 453-460
- Optimal Output Regulation for Square, Overactuated and Underactuated Linear Systems. *Bernhard, S.*, +, *TAC Oct. 2020 4416-4423*

Transfer function matrices

- A Direct Proof of the Equivalence of Side Conditions for Strictly Positive Real Matrix Transfer Functions. *Ferrante, A.*, +, *TAC Jan. 2020 450-452* **Transfer functions**
 - A Simplified Approach to Analyze Complementary Sensitivity Tradeoffs in Continuous-Time and Discrete-Time Systems. *Wan, N.*, +, *TAC April 2020* 1697-1703
 - Analysis and Design of Continuous-Time Multivariable Periodic Controllers: An H_{co}/LTR-Based Approach. *Deshmukh*, A., +, TAC Aug. 2020 3608-3615
 - Analysis of Systems With Slope Restricted Nonlinearities Using Externally Positive Zames–Falb Multipliers. *Turner, M.C.*, +, *TAC April 2020 1660-1667*
 - Necessary and Sufficient Conditions on Negative Imaginariness for Interval SISO Transfer Functions and Their Interconnection. *Liu, M.*, +, *TAC Oct.* 2020 4362-4368
 - Necessary and Sufficient Topological Conditions for Identifiability of Dynamical Networks. van Waarde, H.J., +, TAC Nov. 2020 4525-4537
 - Reduced-Order H_{∞} Filter Design for Delta Operator Systems Over Multiple Frequency Intervals. *Yang, H.*, +, *TAC Dec. 2020 5376-5383*
 - Removing SPR-Like Conditions in Adaptive Feedforward Control of Uncertain Systems. *Wang, Y*, +, *TAC June 2020 2309-2324*
 - Two-Dimensional Frequency-Domain System Identification. Wang, X., +, TAC Feb. 2020 577-590

Transforms

Combining Linear Algebra and Numerical Optimization for Gray-Box Affine State-Space Model Identification. *Prot. O.*, +, *TAC Aug. 2020 3272-3285* **Transient analysis**

Transient analysis

Distributed Learning Over Networks: Effect of Using Historical Observations. Shi, C., +, TAC Dec. 2020 5503-5509

Transient response

- Peaking Attenuation of High-Gain Observers Using Adaptive Techniques: State Estimation and Feedback Control. *Shakarami, M.*, +, *TAC Oct. 2020* 4215-4229
- Singularities and Moments of Nonlinear Systems. Padoan, A., +, TAC Aug. 2020 3647-3654
- Stabilization of Linear Systems by Pulsewidth Modulation of Switching Actuators. Komaee, A., TAC May 2020 1969-1984

Transportation

Efficient Liveness Assessment for Traffic States in Open, Irreversible, Dynamically Routed, Zone-Controlled Guidepath-Based Transport Systems. *Revelicits, S.*, +, *TAC July 2020 2883-2898*

Trees (mathematics)

- Blind Learning of Tree Network Topologies in the Presence of Hidden Nodes. Sepehr, F., +, TAC March 2020 1014-1028
- Consensus of Linear Multiagent Systems With Distributed Infinite Transmission Delays: A Low Gain Approach. *Xu*, *X.*, +, *TAC Feb. 2020 809-816* Structuring Multilevel Discrete-Event Systems With Dependence Structure

Matrices. Goorden, M., +, TAC April 2020 1625-1639

Trusted computing

Privacy-Preserving Distributed Averaging via Homomorphically Encrypted Ratio Consensus. *Hadjicostis, C.N.*, +, *TAC Sept. 2020 3887-3894*

U

- Uncertain systems
 - "Class-Type" Identification-Based Internal Models in Multivariable Nonlinear Output Regulation. *Bin, M.*, +, *TAC Oct. 2020 4369-4376*
 - A Dynamic Feedback Framework for Control of Time-Delay Nonlinear Systems With Unstable Zero Dynamics. *Lin, W., +, TAC Aug. 2020 3317-3332*
 - A Lyapunov-Like Characterization of Predefined-Time Stability. Jimenez-Rodriguez, E., +, TAC Nov. 2020 4922-4927

- A Novel Method to Compute the Structured Distance to Instability for Combined Uncertainties on Delays and System Matrices. *Borgioli, F.*, +, *TAC April 2020 1747-1754*
- A Partial-State Feedback Model Reference Adaptive Control Scheme. *Song*, *G.*, +, *TAC Jan. 2020 44-57*
- Accurate Uncertainty Propagation for Discrete-Time Nonlinear Systems Using Differential Inequalities With Model Redundancy. *Yang, X.*, +, *TAC Dec. 2020 5043-5057*
- Adaptive Control for a Class of Multi-Input Multi-Output Plants With Arbitrary Relative Degree. Qu, Z., +, TAC July 2020 3023-3038
- Adaptive Event-Triggered Control of Nonlinear Systems With Controller and Parameter Estimator Triggering. *Huang, J.*, +, *TAC Jan. 2020 318-324*
- Adaptive Semiglobal Nonlinear Output Regulation: An Extended-State Observer Approach. *Wang, L.*, +, *TAC June 2020 2670-2677*
- An Improved Homogeneous Polynomial Approach for Adaptive Sliding-Mode Control of Markov Jump Systems With Actuator Faults. Du, C., +, TAC March 2020 955-969
- Asynchronous Filtering for Delayed Markovian Jump Systems via Homogeneous Polynomial Approach. Li, F., +, TAC May 2020 2163-2170
- Barrier Function-Based Adaptive Super-Twisting Controller. Obeid, H., +, TAC Nov. 2020 4928-4933
- Command Filter and Universal Approximator Based Backstepping Control Design for Strict-Feedback Nonlinear Systems With Uncertainty. *Zheng, X*, +, *TAC March 2020 1310-1317*
- Constrained Adaptive Model-Predictive Control for a Class of Discrete-Time Linear Systems With Parametric Uncertainties. *Zhu, B., +, TAC May 2020* 2223-2229
- Continuous-Time Accelerated Methods via a Hybrid Control Lens. Kolarijani, A.S., +, TAC Aug. 2020 3425-3440
- Delay-Tolerant Adaptive Robust Tracking Control of Uncertain Time-Delay Systems. Nandiganahalli, J.S., +, TAC Feb. 2020 695-710
- Distributed Robust Adaptive Frequency Control of Power Systems With Dynamic Loads. *Kim, H.,* +, *TAC Nov. 2020 4887-4894*
- Event-Triggered Control for Semiglobal Robust Consensus of a Class of Nonlinear Uncertain Multiagent Systems. *Meng, H., +, TAC April 2020 1683-1690*
- Event-Triggered Global Finite-Time Control for a Class of Uncertain Nonlinear Systems. Zhang, C., +, TAC March 2020 1340-1347
- Finite-Time Sliding-Mode Control of Markovian Jump Cyber-Physical Systems Against Randomly Occurring Injection Attacks. Cao, Z., +, TAC March 2020 1264-1271
- Global Sliding Mode Observers for Some Uncertain Mechanical Systems. *Apaza-Perez, W.A.*, +, *TAC March 2020 1348-1355*
- Global Stabilization of a Class of Stochastic Nonlinear Time-Delay Systems With SISS Inverse Dynamics. *Wang, H., +, TAC Oct. 2020 4448-4455*
- Guaranteeing Global Asymptotic Stability and Prescribed Transient and Steady-State Attributes via Uniting Control. *Kanakis, G.S.*, +, *TAC May* 2020 1956-1968
- Inner-Approximating Reachable Sets for Polynomial Systems With Time-Varying Uncertainties. *Xue, B., +, TAC April 2020 1468-1483*
- Necessary and Sufficient Conditions on Negative Imaginariness for Interval SISO Transfer Functions and Their Interconnection. *Liu*, *M.*, +, *TAC Oct.* 2020 4362-4368
- Nonanticipating Lyapunov Functions for Persistently Excited Nonlinear Systems. Verrelli, C.M., +, TAC June 2020 2634-2639
- Nonlinearity Estimator-Based Control of A Class of Uncertain Nonlinear Systems. Yang, J., +, TAC May 2020 2230-2236
- Observer-Based Robust Controller Design With Simultaneous Optimization of Scaling Matrices. *Sato, M., TAC Feb. 2020 861-866*
- Observers and Disturbance Rejection Control for a Heat Equation. *Feng, H.*, +, *TAC Nov. 2020 4957-4964*
- On the Use of Supervised Clustering in Stochastic NMPC Design. *Alamir, M., TAC Dec. 2020 5392-5398*
- Orbital Stability Analysis for Perturbed Nonlinear Systems and Natural Entrainment via Adaptive Andronov–Hopf Oscillator. *Zhao, J.*, +, *TAC Jan. 2020 87-101*

- Performance Recovery of Dynamic Feedback-Linearization Methods for Multivariable Nonlinear Systems. *Wu*, *Y*, +, *TAC April 2020 1365-1380*
- Quasi-Polynomial-Based Robust Stability of Time-Delay Systems Can be Less Conservative Than Lyapunov–Krasovskii Approaches. Angulo, S., +, TAC July 2020 3164-3169
- Reachability Analysis of Large Linear Systems With Uncertain Inputs in the Krylov Subspace. *Althoff, M., TAC Feb. 2020* 477-492
- Regional Stabilization of Input-Delayed Uncertain Nonlinear Polynomial Systems. *Coutinho*, *D.*, +, *TAC May 2020 2300-2307*
- Removing SPR-Like Conditions in Adaptive Feedforward Control of Uncertain Systems. *Wang, Y.*, +, *TAC June 2020 2309-2324*
- Robust Cooperative Output Regulation of Heterogeneous Uncertain Linear Multiagent Systems With Time-Varying Communication Topologies. *Wang, L.*, +, *TAC Oct. 2020 4340-4347*
- Robust Motion Planning for Uncertain Systems With Disturbances Using the Invariant-Set Motion Planner. Danielson, C., +, TAC Oct. 2020 4456-4463
- Robust Output Regulation by State Feedback Control for Coupled Linear Parabolic PIDEs. *Deutscher, J., +, TAC May 2020 2207-2214*
- Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes. Zhang, C., +, TAC May 2020 2185-2191
- Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. *Qi*, *W*., +, *TAC Jan. 2020 361-368*
- Stabilization of Two-Port Networked Systems With Simultaneous Uncertainties in Plant, Controller, and Communication Channels. Zhao, D., +, TAC March 2020 1160-1175

Uncertainty

- An Input–Output Approach to Structured Stochastic Uncertainty. *Bamieh*, *B.*, +, *TAC Dec. 2020 5012-5027*
- Global Stabilization of Uncertain Lotka–Volterra Systems via Positive Nonlinear State Feedback. *Badri, V.*, +, *TAC Dec. 2020 5450-5455*
- Observer Design for Nonlinear Systems With Output Transformation. de Cossio, F.G., +, TAC Dec. 2020 5205-5219
- Predictor Feedback for Uncertain Linear Systems With Distributed Input Delays. Zhu, Y., +, TAC Dec. 2020 5344-5351

Upper bound

- Mean-Square Exponential Stability for Stochastic Control Systems With Discrete-Time State Feedbacks and Their Numerical Schemes in Simulation. *Liu*, *L.*, +, *TAC Dec. 2020 5384-5391*
- State Observers for Systems Subject to Bounded Disturbances Using Quadratic Boundedness. *Alessandri*, A., +, *TAC Dec. 2020 5352-5359*

Utility theory

Utility Design for Distributed Resource Allocation—Part I: Characterizing and Optimizing the Exact Price of Anarchy. *Paccagnan, D.*, +, *TAC Nov.* 2020 4616-4631

V

Variable structure systems

- A Finite-Time Local Observer in the Original Coordinates for Nonlinear Control Systems. *Possieri*, C., +, *TAC Nov. 2020 4808-4815*
- An Improved Homogeneous Polynomial Approach for Adaptive Sliding-Mode Control of Markov Jump Systems With Actuator Faults. Du, C., +, TAC March 2020 955-969
- Discrete-Time Implementation of Homogeneous Differentiators. *Koch, S.*, +, *TAC Feb. 2020 757-762*
- Discrete-Time Sliding-Mode Control With a Desired Switching Variable Generator. *Bartoszewicz, A.*, +, *TAC April 2020 1807-1814*
- Finite-Time Sliding-Mode Control of Markovian Jump Cyber-Physical Systems Against Randomly Occurring Injection Attacks. Cao, Z., +, TAC March 2020 1264-1271
- Finite-Time Stability of Network Systems With Discontinuous Dynamics Over Signed Digraphs. Shi, X, +, TAC Nov. 2020 4874-4881
- Global Sliding Mode Observers for Some Uncertain Mechanical Systems. Apaza-Perez, W.A., +, TAC March 2020 1348-1355
- Higher Order Sliding Mode Control Using Discontinuous Integral Action. Cruz-Zavala, E., +, TAC Oct. 2020 4316-4323

- Lyapunov Stability Analysis of the Implicit Discrete-Time Twisting Control Algorithm. *Huber, O., +, TAC June 2020 2619-2626*
- Realization of Reachability for the Control of a Class of Nonlinear Systems. *Chai, Y.,* +, *TAC March 2020 1073-1088*
- Semiglobal Finite-Time Trajectory Tracking Realization for Disturbed Nonlinear Systems via Higher-Order Sliding Modes. *Zhang, C.*, +, *TAC May* 2020 2185-2191
- Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. *Qi, W.*, +, *TAC Jan. 2020 361-368*
- The Implicit Discretization of the Supertwisting Sliding-Mode Control Algorithm. *Brogliato, B.,* +, *TAC Aug. 2020 3707-3713*

Variational techniques

- An Adaptive Gaussian Sum Kalman Filter Based on a Partial Variational Bayesian Method. Xu, H., +, TAC Nov. 2020 4793-4799
- Symmetry Reduction in Optimal Control of Multiagent Systems on Lie Groups. Colombo, L.J., +, TAC Nov. 2020 4973-4980
- Variational Integrators for Dissipative Systems. Limebeer, D.J.N., +, TAC April 2020 1381-1396

Vectors

- A Common Framework for Complete and Incomplete Attitude Synchronization in Networks With Switching Topology. *Pereira*, *P.O.*, +, *TAC Jan.* 2020 271-278
- A Test for the Generic Strong Accessibility of Meromorphic Nonlinear Systems. *Carravetta, F.,* +, *TAC Feb. 2020 867-873*
- An Optimal Data Fusion Algorithm in the Presence of Unknown Cross Covariances. Zhang, X., TAC March 2020 1226-1233
- On Algebraic Proofs of Stability for Homogeneous Vector Fields. *Ahmadi, A.A.*, +, *TAC Jan. 2020 325-332*
- On Robust Parameter Estimation in Finite-Time Without Persistence of Excitation. Wang, J., +, TAC April 2020 1731-1738
- Quaternion-Valued Distributed Filtering and Control. Talebi, S.P., +, TAC Oct. 2020 4246-4257

Vehicle dynamics

Behavior of *n*Infinite Chains of Kinematic Points With the Immediate-Neighbors Interaction Dynamics. *Athalye, C.D.,* +, *TAC July 2020 2929-2940*

Vehicular ad hoc networks

Uncertainty in Multicommodity Routing Networks: When Does It Help?. Sekar, S., +, TAC Nov. 2020 4600-4615

Velocity measurement

Hybrid Nonlinear Observers for Inertial Navigation Using Landmark Measurements. Wang, M., +, TAC Dec. 2020 5173-5188

Vibrations

Well-Posedness of Boundary Controlled and Observed Stochastic Port-Hamiltonian Systems. *Lamoline, F., +, TAC Oct. 2020 4258-4264*

Volterra equations

Kernel-Based Simultaneous Parameter-State Estimation for Continuous-Time Systems. Li, P., +, TAC July 2020 3053-3059

W

Watermarking

An Online Approach to Physical Watermark Design. *Liu, H., +, TAC Sept.* 2020 3895-3902

Wave equations

- Exponential Stability of a Schrödinger Equation Through Boundary Coupling a Wave Equation. *Wang, J.*, +, *TAC July 2020 3136-3142*
- Regulation of Inhomogeneous Drilling Model With a P-I Controller. Terrand-Jeanne, A., +, TAC Jan. 2020 58-71
- Singular Perturbation Analysis of a Coupled System Involving the Wave Equation. *Cerpa*, *E.*, +, *TAC Nov. 2020 4846-4853*
- Stability Analysis of Dissipative Systems Subject to Nonlinear Damping via Lyapunov Techniques. Marx, S., +, TAC May 2020 2139-2146
- Trajectory Planning Approach to Output Tracking for a 1-D Wave Equation. *Feng, H.*, +, *TAC May 2020 1841-1854*
- Well-Posedness of Time-Varying Linear Systems. Kurula, M., TAC Oct. 2020 4075-4089

Weibull distribution

Sliding Mode Control for Nonlinear Stochastic Singular Semi-Markov Jump Systems. *Qi, W.*, +, *TAC Jan. 2020 361-368*

White noise

Robust Optimal Filtering Over Lossy Networks. *Feng, Y.*, +, *TAC May 2020* 2272-2277

Well-Posedness of Boundary Controlled and Observed Stochastic Port-Hamiltonian Systems. *Lamoline, F.*, +, *TAC Oct. 2020 4258-4264*

Wireless channels

Optimizing Attack Schedules Based on Energy Dispatch Over Two-Hop Relay Networks. *Gan, R., +, TAC Sept. 2020 3832-3846*

Self-Triggered Network Coordination Over Noisy Communication Channels. Shi, M., +, TAC Jan. 2020 263-270

Wireless sensor networks

- A Set-Membership Approach to Event-Triggered Filtering for General Nonlinear Systems Over Sensor Networks. *Ding, D.*, +, *TAC April 2020 1792-1799*
- An Attack-Resilient Pulse-Based Synchronization Strategy for General Connected Topologies. *Wang, Z.*, +, *TAC Sept. 2020 3784-3799*
- Analytic Sensor Rules for Optimal Distributed Decision Given K-Out-of-L Fusion Rule Under Monte Carlo Approximation. Liao, Y, +, TAC Dec. 2020 5488-5495
- Distributed Second-Order Methods With Increasing Number of Working Nodes. Jerinkic, N.K., +, TAC Feb. 2020 846-853
- Self-Triggered Network Coordination Over Noisy Communication Channels. Shi, M., +, TAC Jan. 2020 263-270
- Whittle Index Policy for Dynamic Multichannel Allocation in Remote State Estimation. *Wang, J.*, +, *TAC Feb. 2020 591-603*