

# 51ST IEEE CDC FINAL REPORT TO IEEE CSS BOG

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The 51<sup>st</sup> IEEE Conference on Decision and Control (CDC) was held December 10–13, 2012, at the Grand Wailea, located on 40 acres along Maui's beautiful and serene Wailea beach. The 51<sup>st</sup> IEEE CDC received 2363 submitted papers, plus 9 tutorial papers. A total of 1262 papers were accepted and organized into 204 technical sessions. The conference acceptance rate was 53.4%. The 51<sup>st</sup> IEEE CDC had 1479 registrants, including 528 student registrations. The 51<sup>st</sup> IEEE CDC expects to have a net surplus of \$56,426.13. The total number of room rights per hotel was 3522 at Grand Wailea, 314 at Marriott, and 498 at Fairmont. The peak number of room rights per hotel was 636 at Grand Wailea, 54 at Marriott, and at 90 Fairmont.

The following sections expand on the above summary, discuss new approaches, assess what worked well, and make suggestions for future conferences. There is a zip file that should accompany this report. The zip file contains various support files, that are indicated by bold text throughout this report. If either is missing, they can be found on my website ([www.ee.ucr.edu/~farrell](http://www.ee.ucr.edu/~farrell)).

## Technical Program

The Program Chair (Elena Valcher) has an excellent report, which is included herein as Appendix I. Therefore, I do not repeat that information in this section. The only additional information is the following which relates to the process for producing, converting, merging, and uploading the videos of the Plenary, Semiplenary, and Bode lectures into the IEEE CSS Online Lecture Library (OLL). The lead contact for this materials is the IEEE CSS Electronic Publication Editor and Webmaster (Maria Prandini).

The following process has been discussed with Maria Prandini, Chris Dyer, and Danny Abramovich. Chris is the lead at Conference Catalyst, which is the company that CSS contracts with to manage the IEEE CSS web page and lecture library. Danny is an IEEE CSS member, past Chair of the IEEE CSS History Committee, and has past experience with video production for the IEEE CSS OLL. After our experiences this year, my recommended process is as follows:

1. Production of files during the plenary: Create two video files:
  - a. Speaker – This file is made from a camera. We had it fixed and asked the speaker to remain at the podium. The alternative is to have a person maneuver the camera to track the speaker as they wander. This can create other challenges.
  - b. Slides – This video should be recorded directly from the computer or LCD projector digital output, not by a camera.

The audio is also recorded. The audio should be recorded from the same microphone used to connect to the sound system, not from the video camera to get the best quality. I think that we actually have both, but used the speaker microphone audio recording for the final product. The video camera audio was a backup. We did have at least two of the speaker videos that were corrupt and unusable. If possible, two video cameras should be used so that there is a back-up.

2. Merging of the files: Time synchronization is the main challenge. If possible, all files should be recorded on the same recording system to eliminate issues of clock drift. My understanding of the process is the following:
  - a. Convert all video files from their native formats (.flv and .mts for CDC2012) to .avi.
  - b. Merge the .avi files using software such as Pinnacle.
  - c. Convert .avi files into the format required for distribution.Avi format is preferred for the merge because it is uncompressed.
3. Upload the files.

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## Finance (Rajesh Rajamani)

The 2012 IEEE CDC expects to have a net surplus of \$56,426.13 after payment of the IEEE audit fee. All other invoices have been paid as of May 1, 2013. The IEEE loan of \$60,000 has been returned.

The total revenue for the conference was \$927,196.05. The major contributors to revenue were registration (\$596,365), IEEE publication acquisition (\$31,425), extra page charges (\$44,800), CSS payments for meetings, function and grants (\$151,850.16) and sponsorships (\$34,800).

The total expenses for the conference were \$870,769.92. The major categories of expenses were the Opening Reception (\$141,991.47), the VIP Reception (\$17,857.92), the Banquet (\$213,321.52), the Closing Reception (\$105,491.36), catering for CSS events (\$76,444.79), Local Arrangements (\$43,970.77), Publication of Proceedings (\$36,518.08), and pre-conference travel (\$15,111.03).

The estimated balance from the conference account book that tracks all revenue and expenses is \$56,426.13 and is very close to the actual final bank balance \$56,190.67. The discrepancy between the two balances is less than 0.026% of revenue.

## Registration (Jagannathan Sarangapani)

A total of 1479 individuals registered for the conference. By larger region, the number of registrants from three countries in North America was 677, from twenty seven countries in Europe was 505, from twelve countries in Asia was 222, from two countries of Oceania was 47, from four countries in South America was twenty seven, and from one country in Africa was one.

The registration desk was assisted by 7 student volunteers and one full time staffer (Cheryl Steward). A timeline from the 2011 CDC was utilized and this worked fairly well. Paperplaza registration access was provided to the Registration Chair in July so that the registration chair could enter the names of the VIPs prior to the advanced registration. Improvements in the workshop registration criteria due to a recent change in the CSS policies did simplify things for the conference registration. Excellent Paperplaza support to the Registration Chair was provided by Pradeep Misra.

The following are a few suggestions to improve future registration operations:

- A set of standard registration categories should be included with all the conference Paperplaza setup for the conference. This will help later if an additional category is needed. The time and cost to add a new registration category once Paperplaza is setup for the conference appears to be costly in terms of time.
- Certain features in Paperplaza should be enabled for easy user access. For instance, registered individuals request changing their registration fee to other individuals due to visa and or other issues. Paperplaza does not allow the transfer of registration fee from one individual to the other without refunding the fee first. Similarly, a number of requests have been received from registered individuals asking the registration chair to change the credit card once a registration has been done. This is currently not possible with Paperplaza. At least a note has to be placed on the conference website if these features cannot be enabled in Paperplaza.
- Though the process of workshop registrations have been simplified, it is still an issue when a workshop is cancelled. For instance, it is not possible for the individuals to transfer themselves to another workshop. Normal practice is to keep a separate list by the registration chair indicating who is enrolled in a workshop. This is time consuming.

The best strategy is to refund the workshop registration fee to all the individuals and allow them to reregister to a different workshop. This way, the workshop lists will give an accurate picture of the attendees in each workshop.

- Window envelopes introduced for the 2012 CDC significantly helped in organizing the registration envelopes in alphabetical order. This will save time for future registration team.
- A number of individuals request receipt prior to and after the conference for attending the event. This is quite time consuming. Paper plaza should enable a feature with a standard letter available from the general chair to each attendee to print their own receipt.

### Sponsorship and Exhibits (Ann Rundell)

We gratefully acknowledge the generous financial support from the U.S. National Science Foundation (NSF), Elsevier (Gold), GE Global Research (Gold), Mathworks (Gold), Springer (Gold), SIAM (Silver), Taylor & Francis (Silver), University of Texas Dallas (Silver), University of Hawaii Manoa (Silver), Journal of the Franklin Institute (Bronze), Visual Solutions (Bronze), Wolfram (Bronze) and We The Translators (Copper). Their and the IEEE Control Systems Society's financial support enable the technical and social programs available at the CDC.

Eleven of our sponsors participated onsite in the 2012 conference. Most of our exhibitors had booths locate on the Haleakala lanai in a garden setting prominently located outside the plenary and semi-plenary lecture halls. Seating with free wireless access, coffee breaks and other refreshments were available in the same area to promote interaction of our attendees with the exhibitors. Onsite, our Gold level sponsors participated with Springer occupying a double booth; Mathworks and GE Global Research staffing a single booth and hosting special sessions; and Elsevier sponsoring two days of coffee breaks. Our Silver and Bronze level sponsors (SIAM, Taylor & Francis, University of Texas Dallas, Journal of the Franklin Institute, Visual Solutions, Wolfram) occupied single booths on the floor. The University of Hawaii, a Silver sponsor, participated through providing support personnel, travel, and support of the STEM Workshop. Our only Copper level sponsor (We the Translators) was not onsite but was acknowledged on the CDC2012 website.

Six of our Gold and Silver level sponsors choose to have fliers inserted into the registration packages (Mathworks, GE Global Research, Elsevier, SIAM, University of Texas Dallas, and Taylor and Francis<sup>1</sup>).

**Recommendations:** Improvements to the process could have been made in the shipping to and from the conference site by the exhibitors, the registration process for the exhibitors, the contract wording to accommodate special requests for special sessions, and conducting a more formal survey in early Nov to ascertain the exhibitor needs onsite for items such as power and internet connections. The details on each of these items are provided below:

1. *Exhibitor shipping to and from the conference site:* The sponsors didn't exclusively use our designated Drayage Company. Many of them chose to arrange shipment through

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<sup>1</sup> Taylor and Francis upgraded from a Bronze to Silver level to obtain the privilege of providing an insert within the registration package. Since they did that after the proceedings went to press they were not recognized at the Silver level in the proceedings but they were on the CDC2012 website and in all documentation generated after the transition.

UPS or Fed Ex or even hand carrying their booth supplies. My advice is to let the exhibitors arrange their own shipment to and from the conference site.

2. **Contract details:** I would suggest considering raising the sponsorship rates to those used by ACC in 2012 or 2013. I would also reword some bits of the contract to help with the special requests. I suggest the following changes to the wording for the levels:
  - **Gold:** Indicate preferred option:
    - Double booth (~160 ft<sup>2</sup>)
    - Single booth (~80 ft<sup>2</sup>) with special session
    - Recognition for two days of coffee breaks
  - **Silver:** Indicate Preferred option
    - Single booth (~80 ft<sup>2</sup>)
    - Recognition for one day of coffee breaks
3. *Special requests for the booth space:* This wasn't a big problem but could be improved with some further attention. To place the booth locations onsite you need to know who needs power and internet connections. It might be nice to create an online form to ask for information from the exhibitors on: power, wireless, hardwire internet, number of tables and chairs, and other special requests (perhaps you could combine this with the mid-November request for names of attendees – see registration issue below).
4. *Registration of sponsor/exhibitor booth attendees:* Even though there was a space, the contracts didn't always state who would attend since these are done in advance of those decisions at many companies. I suggest checking with sponsors in mid-Nov for their list of attendees and then following up with the registration and finance chair to ensure they are registered before they get onsite. (I already inserted this item on the timeline in the excel document.) This year some of the registrations were done by the finance chair when he would process the contracts and some were done by the registration chair. This was a source of confusion. I should have kept better track of this issue.
5. *Processing Contracts:* Sponsors were reluctant to provide credit card information on the contract and then email or fax it to the exhibits chair. Therefore she was having to get this information on the phone and then she would have to call the finance chair to give him the information so he can process the charges. It isn't a streamlined process. As a long term suggestion, I would suggest we look into enhancing Paperplaza to have a sponsorship option where the companies handle this all themselves! They could even register their own attendees. In the short term, perhaps we should consider some other online process of collecting this sensitive information.

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### Sponsor & Exhibitor Timeline:

Time	Topic
February	Review and revise sponsor and exhibitor contract
March	Post boilerplate and text on exhibitor/sponsor webpage
March	Email every potential sponsor contact on initial list
May	Check CDC 2012 website to make sure up to date with sponsors/exhibitors that had joined
Mid July	Email new contacts and follow-ups immediately after the ACC
Early August	Check CDC 2012 website to make sure up to date with sponsors/exhibitors that had joined
Mid August	Send reminder email about impending deadline to all contacts that had not signed on yet
Early Sept	Contact potential academic sponsors in early Sept (this could be done earlier)
Advance Registration Deadline	Deadline for Sponsor Contract and regular registration rate
Mid Sept	Collect final versions of information from sponsors/exhibitors for webpage and proceedings&
Late Sept	Check CDC 2012 website to make sure up to date with sponsors/exhibitors that had joined
Mid Oct	Contact sponsors to provide shipping information and ask Gold and Silver level sponsors if they would provide an insert for the registration package
Late Oct	Proofread exhibitor/sponsor pages in the proceedings prior to printing
Mid Nov	Check with Sponsors/exhibitors on who will be attending the conference in any capacity; get them registered appropriately
Late Nov	Finalize insert list for registration packages
Late Nov	Map out positions of exhibitor booths (double, single, locations, traffic flow)
Onsite at Conference	Position labels on exhibitor tables; support exhibitors as they need to set up
After conference	Provide General Chair with details for the final report

## CDC 2012 Publication Chair Report (Randal Beard)

### Publication Contract with Omnipress

A publication contract was negotiated in 2010 by Pradeep Misra with Omnipress for the 2010, 2011, and 2012 ACC, CDC, and MSC. We used the existing contract.

### Publication Schedule

April 2012

- Submitted IEEE Conference Publication Form in early April ([http://www.ieee.org/web/conferences/organizers/pubs/conference\\_publications.html](http://www.ieee.org/web/conferences/organizers/pubs/conference_publications.html))
- Received Letter of Acquisition (LOA) from IEEE on April 16, 2012. The letter of acquisition contains the ISBN numbers for the CD, the USB, and the IEEE Xplore files.
- Contacted Bob Hamm at Omnipress to discuss the publication process and timeline.

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- Establish PDF Xpress account with IEEE.

### August - November 2012

- Worked with the Organizing Committee to collect information for the Final Program and Book of Abstract. Much of this information was on the conference website. Awards information was obtained from Ted Djaferis in late October. We didn't get all of the sponsor information until days before submitting the document to Omnipress in early November.

### September 2012

- PaperCept (Pradeep Misra) sent me a pdf with all papers and I check them for margin and formatting violations. PaperCept corresponds with authors to get them fixed.
- Sent shipping address and LOA to Omnipress.

### October 2012

- Based on registration data, we decided to produce 1630 Book of Abstracts, 1630 USB drives, and 400 CDs. Communicated these numbers to Omnipress.
- Worked with Omnipress to design the logos and covers for the USB/CD. We supplied high resolution art and photos.
- Generated files from PaperPlaza containing the program at a glance, the technical program, the abstracts, the authors, and keywords. These files required heavy editing to get them in a form ready for publication.

### November 2012

- Nov 14: Supplied Omnipress with all files needed for production.
- Nov 17: Received hardcopy proofs for book of abstracts from Omnipress. Reviewed and provided feedback.
- Nov 17: On-line proofs for USB drives and CDs ready for review from Omnipress. Reviewed and approved.
- Nov 17-26: Completed several rounds of review with Omnipress.
- Nov 26: All material was shipped to Hawaii
- Dec 4: Received confirmation that material had arrived in Hawaii warehouse.

## Miscellaneous

We answered many emails about deadlines, extensions, submission problems, poster orientation, etc. There was much confusion amongst authors on the responsibilities of Publications chairs vs. Program chairs.

We did not use IEEE PDF Express. Paperplaza checked pdf compliance with IEEE Xplore specifications.

We spent a lot of time on copyright issues for authors with special corporate needs. I collected all special copyright forms and sent them to IEEE. My understanding is that PaperPlaza now allows special forms to be uploaded and so this should not be an issue in the future.

Signs, banners, sessions were all be generated from PaperPlaza and sent to the local arrangements chair.

### Hotel (Jay A. Farrell)

The peak room night was 783 (648 at the Grand Wailea, 54 at the Marriott, and 90 at the Fairmont). The total number of room nights was 4454 (3642 at the Grand Wailea, 314 at the Marriott, and 498 at the Fairmont).

Hotel arrangements became particularly important due to the popularity of the venue. Therefore, this topic is divided into several subsections.

### Venue Selection

The CSS specification for CDC 2012 was for a western USA venue. The following locations were considered: Los Angeles, Orange County, San Diego, Phoenix, Scottsdale, and Hawaii. The following venues were considered appropriate and made competitive bids: JW Marriott San Diego, Hyatt Regency San Diego, Hilton San Diego, JW Marriott LA Live, Hilton Waikalua, and the Grand Wailea. A comparison of the venue proposals is summarized in the file **HotelProposals20090720.xlsx**.

The search for venues began by submitting a call for hotel proposals (see **CDC2012RFP.doc**) to the convention and visitors center in each of the cities that were of interest.

### Basic Contract

IEEE has standard contracts that are required to be used with the major hotel chains. This works in the conferences favor, as they include standard terms written in a balanced fashion. The 2012 contract built on the 2011 contract, both of which included a large set of complementary suites, room upgrades, and student/staff reduced price rooms. The suites and upgrades are important as perks for the Operating Committee, conference plenary speakers, and CSS ExComm. The conference contract (**2012CDCFinal20091125.pdf**) and an addendum (**AddendumSignedSOE.pdf**) are included in the report zip file.

The most important portions of the contract are:

- The room block specification: The number of peak room nights, the number of rooms per night, and the total number of rooms should be specified. In our contract we did not hold enough rooms on the Saturday prior to the conference to allow both the BOG meeting and workshops to occur on Sunday. When another group filled in the hotel on the weekend prior to the conference, we were forced to move the workshops until the Friday after the conference.
- The terms for changing the room block after the contract is signed.
- The room rate: We negotiated a tiered rate, so that persons who were interested in having a view could ensure that they received it, while persons on a budget could make that choice. We also negotiated away maid fees, portage charges, resort fees, and internet surcharges.
- Internet fees in the meeting space.
- AV fees: The hotel bid was in excess of \$100k. We paid that outside vendor Presentation Technologies less than \$30k, which included taping of the Plenary, Semi-Plenary, and Bode lectures. In going with an outside vendor, we had to also negotiate into the hotel contract that the hotel would not charge any fees for hotel electricity or union oversight.
- Additional concessions: The main items here are the complementary rooms and upgrades.
- Attrition: This was worded very carefully with the help of IEEE Staff (Vita Feurstein)

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- Reservation Procedures: The main items were the cancellation policy, amount of the deposit, and the “walk-cause”.
- Food & Beverage: This was inserted to gain concessions elsewhere. It is very low risk. In reality, we expected to have Food and Beverage exceeding \$500k.
- Function Space: We reserved all meeting and social space for the entire week Sunday through Friday. We did not expect to need it, but wanted to prevent the hotel from scheduling another group around our meeting. This worked well as it also gave us the ability to negotiate with the hotel for additional concessions when they needed space back on the Sunday prior to the conference. Exhibit B of the contract explicitly lists all reserved space so that there could be no confusion.
- Billing arrangements: The conference was run entirely on credit. We paid only \$1000 in advance of the event.
- Termination clause: The termination by the hotel was purposefully written to be unquantifiable and possibly very large, so that the hotel could not calculate a “buyout” amount. The corresponding buyout amount for IEEE to cancel the contract was written to be a specific dollar amount. Both items were done to limit the risk to IEEE. There are at least two prior years where the contract was cancelled by the hotel.

Vita Feuerstein ([v.feuerstein@ieee.org](mailto:v.feuerstein@ieee.org)) of IEEE was very helpful both with the basic contract and the contracts with the overflow hotels.

### Overflow hotels

The conference required two overflow hotels, the Marriott and the Fairmont. Negotiating with the overflow hotels was very different from negotiating with the main hotel. The overflow hotels have significant negotiating power and do not offer complementary rooms, because they know that there are a limited number of nearby hotels with rooms. However, the General Manager looks bad if the adjacent hotels are full when the General Manager’s hotel is not. It also contains significant risk to the conference as the hotels want a guarantee from the conference for the rooms that they hold.

It was clear by mid-summer of 2012 that the Grand Wailea was going to sell out. At that time, I contacted IEEE to figure out the process. Vita Feuerstein (IEEE) identified another IEEE conference (MegaGauss 2012) that was in a 300 room attrition situation at the adjacent Marriott in October 2012. Vita and I negotiated a three party contract between CDC, MegaGauss and the Marriott wherein Marriott would hold 50 rooms per night for 6 nights (300 room nights) for CDC registrants. These rooms would count against the MegaGauss attrition, and MegaGauss would be responsible for any attrition charges on the 300 rooms. This arrangement limited risk for all parties. It worked well with the room block filling completely. Marriott was a bit flexible with reshaping the number of rooms per night, but could not offer additional rooms due to another group being in-house. By mid-September, it was clear that the Marriott was also going to fill its block. The Marriott overflow contract is **IEEEMarriottCDC2012FINAL.doc**.

The Fairmont and Four Seasons each had significantly higher standard rates than the Marriott. After many conversations, the Fairmont was willing to offer a floating number of rooms at a tiered rate structure similar to the Grand Wailea rate structure. We did not guarantee a minimum number of rooms and they could have stopped offering rooms to our registrants at any time, but we listed their hotel on



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our web site to point the overflow to them. It was low risk for both parties and worked well. The Fairmont contract is **IEEE-FairmontCDC2012Agreement.pdf**.

### Predicting the Number of Required Rooms

Tracking and predicting the required number of rooms was a challenge. The prediction problem occurs at a few different times, mainly when signing the original contract with the hotel a few years in advance of the conference, and again in the March through November timeframe in the year of the conference.

At the time when the contract is written, the main data is from prior conferences. I received most of my data at this stage from MaryAnn Stroub who works with Ed Chong at Colorado State University. In the year of the conference, since we were pretty certain that we would sell out the entire main hotel, we tried to predict the number of required room nights using the number of advanced registrants, the number of papers, and the number of unique authors on papers. This gave some guidance, but none worked particularly well. The data is in **PickupVSReg.xlsx**. The realtime tracking of the number of room nights per hotel was very useful as an indicator of when each hotel would fill. This data is in **RoomBlockTotal.xls**.

## PROGRAM CHAIR REPORT

51<sup>ST</sup> IEEE CONFERENCE ON DECISION AND CONTROL (CDC 2012)

MAUI, HAWAII, DECEMBER 10-13, 2012

**Maria Elena Valcher**

The purpose of this report is to collect my personal experience as Program Chair (in the following, PC) of the CDC 2012 and to provide some (hopefully useful) suggestions for future Program Chairs. The order according to which the issues will be illustrated is simply the order according to which they popped up, depending on the tasks I had to perform or the problems I had to address.

### 1. PRELIMINARY DECISIONS

Probably the first decision one has to take is what submission types will be offered at the conference. Since regular papers and invited papers are standard choices that can be taken for granted, this essentially means deciding whether or not there will be interactive and tutorial presentations.

In the case of CDC 2012, the decision about interactive papers was a rather easy one, since both I and the conference General Chair (GC), Jay Farrell, were in favor of having only lecture presentations. However, when visiting the conference hotel, we searched for an appropriate area where interactive presentations could have been located, in case there had been the need. As a matter of fact, we came very close to changing our mind about this issue, since the number of submissions (2363, plus 9 tutorial papers that were submitted later) was much higher than expected (1800), but we decided to make use of a couple of large rooms we initially left aside, and this allowed to increase the number of lecture presentations we could offer. So, the first advice is to be always ready for a back-up plan and always search for a large area that could host interactive sessions, in case of need.

As far as tutorials are concerned, after hearing about past experiences, we decided to appoint a Vice Program Chair for Tutorial sessions, who would have invited people to submit proposals for such sessions. This would have guaranteed both the quality and a sufficiently diverse range of topics. So, tutorial sessions were only by invitation.

Clearly, the next step to take is to appoint the persons who will serve in these fundamental roles: I chose Thomas Parisini as Vice Program Chair for Invited Papers and Andy Teel as Vice Program Chair for Tutorial Papers. In case there had been interactive papers, the three of us could have managed them among ourselves.

I regard myself as very lucky in being Program Chair at a time when I could count on Alessandro Astolfi as Conference Editorial Board (CEB) Chair and on Pradeep Misra, on sabbatical in my Department, as PaperPlaza manager and endless source of useful information about both the CSS conferences and PaperPlaza.

Another preliminary step consisted in agreeing the deadlines for the first and the final submissions with the GC, the CEB Chair and the CSS Conference Publication Chair (at the time

we set the dates it was still Pradeep, later Randy Beard stepped in). It is important to keep in the loop both the CEB Chair and the Publication Chair, since the deadlines identify the time window where their work will be performed. This must be remembered also later, in case for some reasons the conference decides to move the deadlines, something that in any case can be done only with the authorization of the CSS Executive Committee.

### 2. WHEN DOES THE PROGRAM CHAIR JOB REALLY START?

Apart from the aforementioned preliminary tasks, and the preparation of the Call for Papers and of the conference web pages (in fact, the PC just gives some feedback about both of them; he/she is not really involved in their creation), the real job starts about 5-6 months before the first submission deadline, when the PC has to decide how to organize the whole review process and which role the Program Committee has in it.

Traditionally, the review process of Regular papers has been handled by the CEB, while the review process of the Invited papers/sessions by the Program Committee. Alessandro, as CEB Chair, and Thomas, as Vice PC for Invited Sessions, proposed to modify the organization with respect to the standard one. So, we agreed that the CEB would initially handle the review process of all papers (independently of the fact that they were regular or invited). Clearly, this fact has pros and cons: the main pro being that this is a more fair treatment, since all papers go through the same review process. The main con is that the CEB workload increases (and indeed we had a back-up plan in case the workload would have been excessive: some members of the Program Committee would have joined the CEB, and serve as CEB AEs. But there was no need for it). Also, there is an additional small con: if Invited sessions are not kept together, it is a little more difficult to check for conflicts of interest in assigning papers to the CEB AEs (it would not be appropriate to assign an invited paper to an AE who has a paper in the same invited session). But Alessandro is 100% reliable and this was not regarded as a problem.

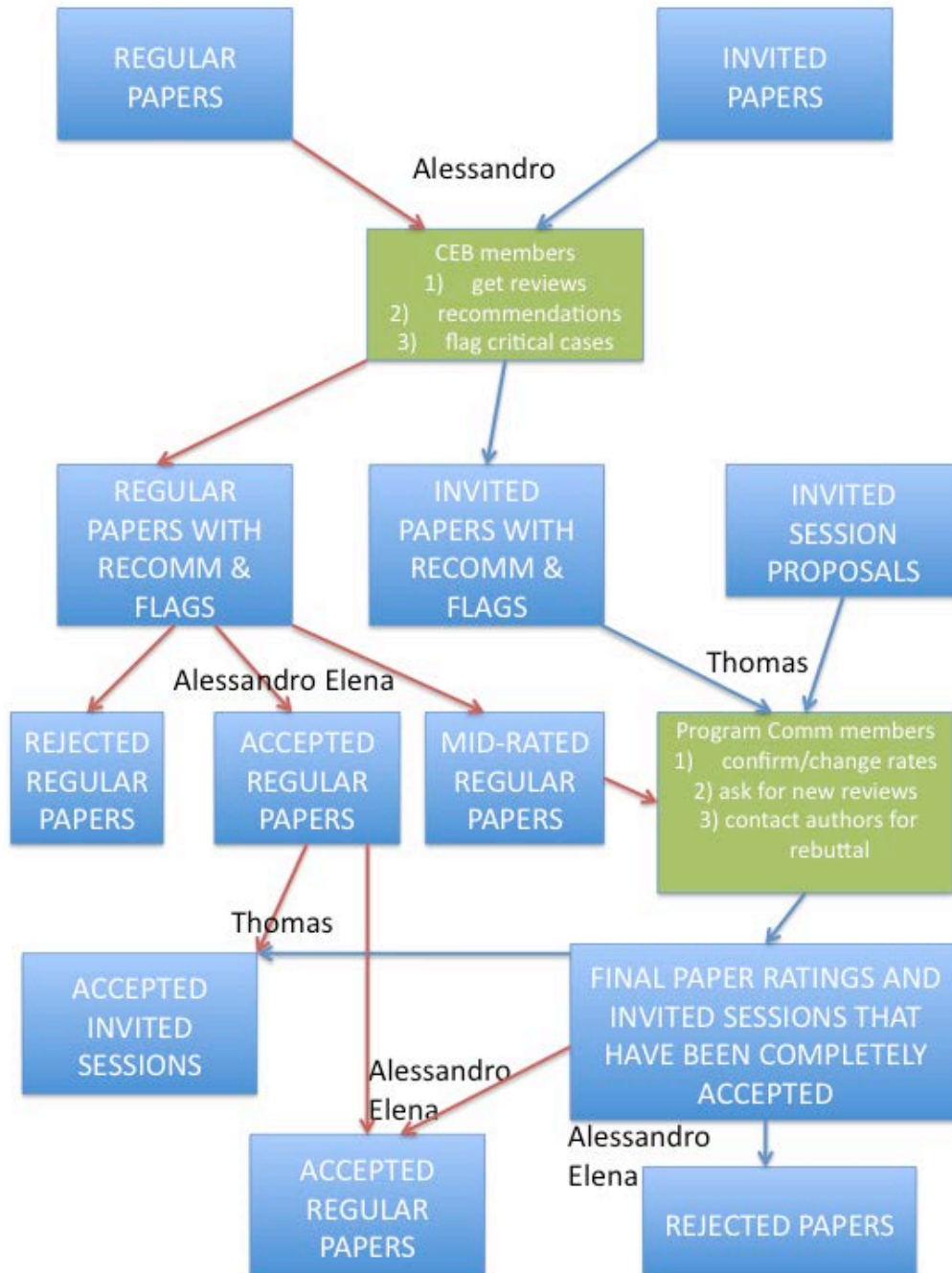
At the end of the first phase of the review process, all Invited papers belonging to the same session (independently of the rate and of the recommendation they received), together with the corresponding Invited Session proposal, would have been assigned by Thomas to the Program Committee members.

At the same time, Alessandro and I would have checked all the recommendations for the regular papers. Papers with high ratings and consistent reviews would have been assigned to Program Committee members; papers with justifiably poor ratings would have been rejected; papers with intermediate or not consistent ratings would have been assigned to Program Committee members.

It must be remarked that Program Committee members have the following possibilities: a) confirm/revise the paper recommendations; b) ask for an additional review; c) in critical cases, ask for clarifications from the Authors. At the end of this second phase, each paper and each Invited Session should have a recommendation. Final decision was left to Thomas for the Invited and to the PC for the Regular papers.

The review process structure we agreed upon (in September 2011) is illustrated in the following flowchart.

2a. THE REVIEW PROCESS STRUCTURE



### 2b. PROGRAM COMMITTEE MEMBERS INVITATION

The list of potential Program Committee members was put together by Thomas and I in late October, and revised by Alessandro, based also on the statistics of past CDC submissions. In fact, we considered the average occurrence of the various keywords in the papers submitted to past CDCs and we chose Program Committee members depending on their expertise, in order to guarantee a good coverage of all topics, keeping into account their relative weight.

Invitation letters (see Appendix A) were sent out in early December, just before the CDC-ECC 2011. 44 persons were invited and 39 of them accepted. The final list of Program Committee members is in Appendix B.

### 2c. SIAM PAPERS

There is a long-term standing agreement (MOU = Memorandum of Understanding) between CSS and SIAM regarding the possibility of submitting papers that have been either accepted or published in SIAM journals as CDC papers. This MOU has been recently renewed (see Appendix C).

To streamline its content, the SIAM Liaison Representative to the Program Committee of the specific CDC (for CDC 2012 it was Belinda Batten, who was also the 2012 SIAM Liaison representative for CSS) invites what he/she regards as the most suitable papers that have been accepted/published in the last year on SIAM J. on Control and Optimization (SICON) - and possibly other SIAM journals - to submit their manuscripts to the CDC. Submission deadlines, paper format and page constraints for SIAM papers are the same as those for Regular and Invited papers, however submissions are only by invitation and the review process of these papers is handled by an ad-hoc committee proposed and chaired by the SIAM Liaison Representative to the CDC Program Committee (in the following referred to only as "SIAM Liaison Representative"), and approved by the PC.

This committee provides recommendations for each SIAM paper, but the final decision about paper acceptance/rejection is taken by the PC.

The first contact with Belinda was in early January 2012, which is late, but this was due to the fact that Belinda's appointment started in January 2011 and her role had not been well clarified to her, while I assumed it had. Nonetheless she was still able to send out all the invitation letters and to form the committee in time for the first submission deadline. My recommendation is to get in touch with the SIAM Liaison representative in September/October of the year before the conference. Of course, this may also mean getting in touch with SIAGCT (see MOU in Appendix C) to solicit the nomination in September, in case the representative has not been appointed yet.

### 2d. PLENARY/SEMIPLINARY SPEAKERS CHOICE

The decision about the plenary and semiplenary speakers is typically taken by the GC, in agreement with the PC. The first step we took in this direction was that of consulting the list of plenary/semiplenary speakers (with the titles of their talks) offered in recent conferences of the Systems & Control area. I had that list since I started collecting this information when I was Vice President Conference Activities (VPCA), and I kept updating it later on since this would have been useful for the CDC 2012. In principle, the VPCAs after me should have kept updating the list, in turn.

Clearly, the reason for consulting the list is to avoid to offer a talk that is very similar to those recently proposed.

In addition to the Bode lecturer, Jessy Grizzle, who was selected by the CSS outgoing President the year before (2011 CSS President was Richard Middleton), we decided to have one plenary lecturer (Kameshwar Poolla) and 4 semi-plenary lecturers (Magnus Egerstedt, Mustafa Khammash, John Lygeros, Mario Sznaier). In this way we could have, on each of the 4 conference days, either a single plenary or two alternative (in parallel) semi-plenaries.

I have to say that I am much in favor of semi-plenaries compared to plenaries: it allows to widen the offer to conference participants, and also to select younger speakers and less main-stream topics. Of course, the con is that you cannot attend two semi-plenaries in parallel!

### 3. FIRST SUBMISSION

The deadline for first submission was first set on March 7, almost a year in advance, and we immediately announced (both on the web page and on the conference call for papers) that we did not plan to move the deadline (as it was typical in the past) unless there had been "extenuating circumstances". As a matter of fact, with the exception of an hurricane in the south USA (that caused only an individual deadline extension to the authors of a single paper working in that specific area) and of some emails of inquiries about the possibility of a deadline extension, there were no extenuating circumstances and we kept the deadline firm.

Of course, there were a few complaints for the lack of a deadline extensions, but a very small number of them, and we chose to accommodate some special cases that seemed to be well-motivated. At the end, 2363 papers were submitted, divided as follows:

Regular Papers:	1866
Invited Papers:	484
SIAM Papers:	13

We also had a record number of 80 Invited Session proposals. Note that we set the deadline for Invited Session proposal submission to March 1, in order to allow Thomas to keep track of the Invited Session papers expected for submission.

### 4. iTHENTICATE AND OUTRIGHT REJECTIONS

The first part of the review process was completely and masterfully handled by Alessandro, and hence my main role in that period was that of taking care of two issues: 1) checking papers for which CEB AEs had recommended outright rejection (Alessandro classifies them as 4I in PaperPlaza, by borrowing a terminology used in TACO, and flags them so that they can be easily identified); 2) checking papers to which iThenticate, the software that detects plagiarisms and duplications, had given a high similarity score.

1) I personally checked all the papers (41 at the end) that had been rated 4I and hence had not been sent out for review by the CEB AE to whom the paper had been assigned. I first read each paper to see whether it was clearly unsuitable, and then checked whether the corresponding report was carefully written and well-motivated. When it was not, I asked the AE through Alessandro, to revise the report and give more substance to the rejection.

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Immediately after the submission deadline Alessandro ran the software for each paper (with the exception of SIAM papers, for which it would have not made sense, since they were purposely short versions of accepted/published papers). Independently of the score (cumulative percentage of overlap with other manuscripts), each paper was assigned to an AE. Alessandro reviewed all the papers that had a high cumulative score or a medium score but a high overlap with a single reference, and prepared an Excel file with the results of the iThenticate evaluation.

2) I personally checked all the cases that Alessandro had pointed out: I discarded most of them, and partitioned the remaining ones into two classes (serious cases and minor cases). The classification was based on two main aspects: how large was the maximum overlap with a single reference and whether the copied reference(s) was (were) quoted or not. I would like to remark that what iThenticate is able to detect is verbatim copies, so I singled out papers that appeared to be, for at least 30% of their content, literally copied from one published reference, either by the same Authors or by other Authors. While performing this evaluation, I added to the list those papers that had been flagged by the AEs: there were cases of papers that had been already published in conference proceedings but iThenticate had not detected them (probably they were not part of its database) or that had been accepted to appear/be presented in a version very close to the one of the submitted CDC paper (but were not available on-line yet).

The lists of papers was sent to the Vice President for Publication Activities, Frank Doyle, who forwarded them to the CSS Committee on Ethics in Publishing for further evaluation and possible sanctions.

### 5. THE CEB REVIEW PROCESS AND THE RECOMMENDATIONS OF THE CSS COMMITTEE ON ETHICS IN PUBLISHING

The first phase of the review process was handled by the CEB. Recommendations for the large majority of the papers were received within May 15. This was a little later than I hoped for, but I understood the request for an extension from the CEB, due to the heavier workload with respect to the usual one. For a limited number of papers that had enough reviews but not a recommendation, Alessandro and I made a recommendation.

In the meantime I also received from Belinda all the recommendations for the SIAM papers. There was some misunderstandings at the beginning, and we got slightly superficial reports, but after I talked to Belinda the situation dramatically improved and we got accurate reviews (two for each paper) and reports. All the paper were rated A, B+, B and B-, and I believe they were fair ratings.

At the same time, the CSS Committee on Ethics in Publishing considered all the papers in the list I had sent them, but decided to address only the most serious cases. As a final result of this evaluation, the Committee got in touch with a few Authors, to warn them that their behavior was not appropriate according to the rules of ethics in publishing established by the IEEE (and available in the IEEE Publication Services and Products Board Operations Manual, for short PSPB manual). However, this message was in most of the cases conveyed to the Authors through the final CDC report, as an addendum that I put at the end of the CEB AE report (based on the reports I received from the Committee on Ethics in Publishing, through the VPPA, Frank Doyle).

At the very beginning of May I started checking the regular papers for which a final recommendation was available, to see whether they had accurate reports and rates consistent with the CEB AE reports. On May 18 I sent a letter to all Program Committee members, by informing them in advance regarding the assignment and telling them that they would have

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been individually contacted by Thomas regarding the Invited Session (see Appendix D). All invited papers were regrouped, in the session they originally belonged to, and assigned (May 25) by Thomas to the Program Committee members.

I kept checking all regular papers (yes, I mean ALL) to see whether they had enough reviews and consistent reports. As the time passed by, it became clear that we would have put the threshold somewhere between B and B-. So, once I had confirmed the rates given by the CEB, I flagged as accepted all papers rated A and B+ that had consistent reviews, rejected all papers rated C or less for justifiable reasons, left papers rated B and B- in a temporary limbo, and flagged all the critical cases. At the end of this phase, I assigned (May 26) 74 critical cases (too few reviews, conflicting reviews,..) to Program Committee members. Final recommendations for each of the invited papers, invited sessions and regular papers were collected by June 15.

Also in this case there was the need for some adjustments, but at the end I believe that the Program Committee members did a great job. As mentioned earlier, this phase required to collect a few additional reviews, in case the Program Committee member did not feel comfortable at taking a decision only based on the reviews previously collected by the CEB AEs.

I would like to mention that even if the work of all the CEB AEs was noteworthy and fundamental for the success of the conference, and hence I sent a letter of thanks to all of them, nonetheless some of the AEs really did an amazing job. So, I chose to send to each of them (7 AEs) a personalized letter (see Appendix E) to warmly thank them for their careful work and accurate reports, especially in case of critical papers with very conflicting reviews. I believe that mentioning their names in this report is a due tribute to their outstanding performances:

Claudio Altafini  
Jamaal Daafouz  
Nael El Farra  
Marina Indri  
Dina Shona Laila  
Felice Andrea Pellegrino  
Olaf Stursberg

I also recommended them to Panos Antsaklis as potential candidates as IEEE TAC AEs, and they were all invited to the CDC VIP reception. Unfortunately, few of them attended the conference and could enjoy the reception.

### 5a. RE-EXAMINATIONS

The re-examination process was approved by the CSS ExCom when I was VPCA, in 2010, and started with the CDC-ECC 2011. Briefly, it is the possibility to contact the Authors of selected papers to address specific critical issues to allow the CEB to decide whether the papers can be accepted or not. This possibility is offered to a very limited number of papers, with a borderline rate (for the CDC 2012 it essentially pertained papers rated B or B-), that present a critical issue (for instance a proof with a mistake or a seriously unclear part): if the issue can be solved the paper could be acceptable otherwise it could not. The Authors can either take this possibility or just refuse it. Authors were made aware of the fact that addressing the concerns raised by the Reviewers does not automatically guarantee the paper acceptance.

Papers that warranted re-examinations had been flagged by the CEB AEs, but Alessandro and I selected only some of them, since the others did not seem to fall in the category for which it is



reasonable to offer this possibility. Also, we added a few more papers. Since all Invited Papers would have been examined by the Program Committee, we decided that re-examination would have made sense only for regular papers. Of course, the papers to which the re-examination process had been offered would have not been sent to the Program Committee for further evaluation. Indeed, this would have not even been possible, since the two tasks were accomplished in parallel.

At the end, re-examination was offered only to 54 regular papers. The Authors were contacted on May 28, and were given till June 15 to submit a revised version of the paper, together with a letter addressing all the concerns raised by the reviewers and the CEB AEs. 2 papers were withdrawn by the Authors. 3 papers were de facto withdrawn, since it was asked the Authors to merge two manuscripts they had submitted into a single one. So, 49 papers came back. They were almost all accepted (2 were not accepted). The decision about whether the re-examination had brought to a satisfactory result or not was taken by the same person who had flagged the paper for re-examination. So, in most of the cases it was the CEB AE to check the revised version, while for a few cases Alessandro and I took care of them.

At the end of the review process, a total of 16 papers had been withdrawn from the program (including those that had been contacted by the CSS Committee on Ethics), before any final decision about them was communicated to the Authors.

### 6. TUTORIAL SESSIONS

The choice of the topics and the invited speakers of the Tutorial sessions was completely left to the Vice PC for the Tutorial sessions, Andy Teel. The only constraints I gave him, agreed with the GC, were:

- 1) minimum 4 sessions, maximum 8;
- 2) topics sufficiently diverse;
- 3) each talk should last a multiple of the standard 20 minutes slots;
- 4) each tutorial session should be accompanied by at least one conference paper, in order to at least provide a list of useful references for the interested attendee.

Andy started getting in touch with potential organizers in early December 2011 and finalized the list in January 2012. What follows is the final list:

5 tutorial sessions:

(1) TITLE: Fundamentals of Economic Model Predictive Control

ORGANIZERS: James B. Rawlings, David Angeli

(2) TITLE: Control of Nonlinear Delay Systems

ORGANIZERS: Miroslav Krstic, Nikolaos Bekiaris-Liberis

(3) TITLE: Information Structures in Optimal Decentralized Control

ORGANIZERS: Nuno C. Martins, Michael C. Rotkowitz, Serdar Yuksel, Aditya Mahajan

(4) TITLE: Synchronization in Coupled Oscillators: Theory and Applications

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ORGANIZERS: Francesco Bullo, Rodolphe J. Sepulchre, Murat Arcak

(5) TITLE: Event-triggered and Self-triggered control

ORGANIZERS: Paulo Tabuada, W.P.M.H. Heemels, Karl H. Johansson

The review process of Tutorial session was handled through PaperPlaza by Andy, and had a different first submission deadline (May 2012). However, in order to include Tutorial sessions in the conference program, I asked Andy to provide me with the final information about the tutorial sessions by the beginning of July, in time for the Program Committee meeting (Padova, July 16-17, 2012).

I have to say that while I was very happy with the quality of the tutorial sessions, in particular both the topics and the organizers were excellent, I was less pleased with the final settlement both regarding the length of the manuscripts associated with the talks and the number/length of talks in the sessions. Indeed, we should have probably set more precise guidelines in this respect.

At the end, the tutorial sessions consisted, overall, of 13 talks, but only 7 tutorial papers were submitted. For 4 sessions there was a single paper associated with the session talks, while one tutorial session had three papers associated with its talks.

### 7. FINAL DECISIONS

Once all the Program Committee members' recommendations came back, it became clear that - unless specific reasons would have asked for different decisions - we would have been able to accept only paper rated A, B+ and B. In addition to the tutorial papers, 1262 papers have been initially accepted, all of them rated A, B+ and B, with the exceptions of 9 papers rated B-: 7 of them belonged to Invited Sessions and were the only papers rated B- in their Invited Sessions. 2 of them were SIAM papers.

26 regular papers rated B have been rejected, since their real rate was somewhat intermediate between B and B-.

The accepted papers have been put in 68 sessions (4 of them Invited) consisting of 7 papers, and 136 sessions (47 of them invited and 5 of them tutorial) consisting of 6 papers.

The invited session were formed first. To complete some of them, 28 regular papers have been used. When two papers had been added to complete an Invited Session, Thomas has contacted the Invited Session Organizers to ascertain whether they were fine with this solution or they preferred the session to be classified as Regular. They all agreed. Then regular sessions were formed, and all the Chairs and Co-chairs of all the sessions were selected.

### 8. PROGRAM COMMITTEE MEETING

The Program Committee meeting was held in Padova on July 16 and 17. The GC (Jay Farrell), the PC, the CEB Chair (Alessandro Astolfi), Pradeep Misra and two Program Committee members (Franco Blanchini and Paolo Bolzern) attended the meeting.

During the Program Committee meeting the following tasks were performed:

- scheduling of the sessions (conference program);
- check of conflicts;

- rescheduling of the sessions;
- decision about the chair/co-chairs of the plenaries and semiplenaries;
- revision of the acceptance/rejection letters.

Decision letters were sent out on Tuesday, July 17, in the afternoon (Italy time).

We decided not to reject 3 of the aforementioned 26 regular papers (rated B/B- but not accepted): we regarded these 3 as the best of the group, and decided to keep them in a limbo status. We contacted the Authors and asked them whether they would have accepted to revise the paper according to the Reviewers' suggestions, and remain ready for submission of the final version in case we would have a free slot at the end of the Final Submission Deadline (September 5).

The Authors of all three papers accepted our offer, and indeed we ended up having many more than the 3 slots we offered. So, it may make sense to extend this possibility to a larger number of papers, with the caveat that you will never know whether the slots that will become available will be suitable for the papers you have kept in stand-by!

### 9. PROTESTS AND WITHDRAWALS AFTER THE DECISION

One paper was withdrawn immediately after the deadline. The paper was immediately replaced by one of the three papers put in stand-by, as it had a topic that agreed with the session from which the accepted paper had been withdrawn.

We received 31 requests of clarification and real protests; each of them was addressed within a few days. All the protest were handled smoothly. In two cases we decided to contact additional reviewers and we finally decided to put also these two papers in stand-by, since they were good papers.

After the final submission deadline (September 5), we contacted the authors of the accepted manuscripts that had not been uploaded by giving them 4 days of grace period.

On September 10 I sent out a message to the authors of missing papers, offering them the possibility to present their results (and hence have their talk included in the final program) even if their paper would have not been included in the proceedings. Nobody expressed any interest in this possibility.

At the end, 7 accepted papers had been withdrawn from the program for various reasons around the final submission deadline (September 5). 9 papers (1 invited paper, 1 SIAM paper, 7 regular papers) were simply not submitted. So, a total of 17 papers were not uploaded even if accepted. On September 13, I accepted the 4 papers that were still kept in stand-by, re-organized the schedule and sent the Authors the acceptance letter. The program was finalized on September 14.

### 10. AFTER THE FINAL PROGRAM CREATION

In September and October, once the program had been finalized, the only tasks I dealt with were: 1) chasing and changing chairs/co-chairs (when someone who had already accepted to serve in that role informed me that he/she would have not attended the conference); 2) preparing the Program Chair message for the Final Program booklet; 3) checking the draft of the Final Program and Book of Abstracts.

### 11. ON SITE

Well, I have to admit that the PC duties during the conference are very limited. Of course, it is better to always be around, just to be sure that everything works nicely, but I would say that the few main tasks I took care of were the following ones:

- 1) chairing or co-chairing plenary and semi-plenary sessions (which also means to be ready to give a brief introduction to the speakers);
- 2) taking care of last minute cancellations (some people sent me emails informing me that they would have not attended the conference, so I tried to go to each session and inform the chair and co-chair in advance of the existence of a no-show);
- 3) supervising the distribution and collection of the session forms.

I have to say that the third task was quite a failure. Of course, it is not expected that the PC goes around in the conference rooms distributing and collecting forms, so I left this task to the student volunteers. Unfortunately, the person who was in charge did not do a very good job and in the first two days a lot of sessions chairs did not find the forms in the rooms (and hence did not even dream of asking). On the other hand, the last day of the conference the forms were put in an envelope, but the envelope disappeared, and at the present time it is not clear whether it will be recovered or not. Luckily I picked up the forms at the end of each day, so I lost only those collected in the last day, but the final result is that the information about no-shows and session attendees is incomplete. To be honest such information is of little use for the present PC and only useful for the next one. In any case, I would have preferred to be able to collect all the data.

After I came back home, very happy for the successful conference, my only duty was to write this report and a short version to be included in the final GC report. My strong advice is to start writing the report immediately in March (as I actually did), when the conference review process starts. As time passes by, one loses track of the numbers and the details, and later it becomes almost impossible to write a detailed report, unless one has stored all the numbers and data somewhere!

### 12. CONCLUSIONS

There are various way of serving as PC of a CDC. The CSS CEB is such a well trained and organized machine, masterfully chaired by Alessandro, that I believe would be able to compensate even for the laziest PC! However, in my view, if one accepts to serve as PC, he/she should look at it as a challenge and try to get the best out of it. As conference participants, we are always able to complain about how sloppy was the review process, how few were the talks we were interested in, how many were the parallel sessions and how badly organized was the program layout. Well, as PC this is your time to make things work at what you believe is their best.

Of course, you will not be alone. For better or worse, what you will be able to achieve depends a lot also on a huge number of people: authors, first of all, then reviewers, AEs, Program Committee members, Vice Program Chairs and even, on site, student helpers! They generally provide a great support, but occasionally you will have to compensate for what they did not do accurately! So, it is clear that the more you are committed and careful, the smaller will be the chances of mistakes in taking acceptance/rejection decisions, of inaccuracies in planning things, and finally of receiving complaints. Independently of this, I believe that you have the choice between doing something that makes you feel satisfied, or just taking care of the minimal duties that the PC role imposes. I chose the first solution. It brought a huge amount of work, especially

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in May-July, when I ended up reading reviews and reports most of the day, but it was worthwhile. At the end, it was a beautiful adventure that also strengthened my relationship with some friends: Alessandro, Thomas and Jay. Something I will always remember.

Padova, Italy, December 20, 2012

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### APPENDIX A. INVITATION TO SERVE AS PROGRAM COMMITTEE MEMBER

Dear NAME

As Program Chair, I am pleased to invite you to serve on the Program Committee of the **51<sup>st</sup> IEEE Conference on Decision and Control (CDC)**, which will be held during 10-13 December 2012 in Maui, Hawaii.

For details, please see the conference website:

<http://control.disp.uniroma2.it/cdc2012/>

For 2012 CDC, we will have two rounds of reviews. The "first round" of review for all invited as well as contributed papers will be carried out by the Conference Editorial Board (CEB). Subsequently, you, as a member of the Program Committee, will be involved in a second round of review for selected submissions. This round will include all invited session papers, assigned to you by Thomas Parisini (Vice Program Chair for Invited Sessions) and selected contributed papers, assigned to you by Alessandro Astolfi (CEB Chair) and myself.

In this second round of review you will be asked to evaluate the reviews as well as the recommendations provided in the first round of review for all these manuscripts, possibly undertaking further actions (change of recommendation, additional review, request for a clarification from the Authors).

Your main workload will occur during May and June of 2012. I would ask you to verify that you do not have conflicting commitments in that period, when the aforementioned activities will take place.

I look forward to hearing from you. I would very much appreciate if you could let me have your response by December 20, 2011. I would be really delighted if you could accept my invitation.

Sincerely,

Elena Valcher  
IEEE CDC 2012 Program Chair

### APPENDIX B. CDC 2012 PROGRAM COMMITTEE MEMBERS

Aghdam, Amir	Serrani, Andrea
Bai, Er-Wei	Smith, Ralph
Blanchini, Franco	Stewart, Greg
Bolzern, Paolo	Sznaier, Mario
Bullo, Francesco	Tarbouriech, Sophie
Campi, Marco	Tits, Andre'
Colaneri, Patrizio	Van De Wouw, Nathan
De Nicolao, Giuseppe	Wardi, Yorai
Georgiou, Tryphon	Xie, Lihua
Giua, Alessandro	Yin, George
Hadjicostis, Christoforos	Zheng, Wei Xing
Henrion, Didier	
Hespanha, Joao	
Hutchinson, Seth	
Ishii, Hideaki	
Jabbari, Faryar	
Kahveci, Nazli	
Lagoa, Constantino	
Lawrence, Doug	
Lin, Zongli	
Marconi, Lorenzo	
Middleton, Richard	
Ozbay, Hitay	
Paschalidis, Ioannis	
Petersen, Ian	
Prieur, Christophe	
Rivera, Daniel	
Sabatier, Jocelyn	

## APPENDIX C. SIAM MOU

### **Memorandum of Understanding between The IEEE Control Systems Society (CSS)**

**and the**

### **Society for Industrial and Applied Mathematics (SIAM)**

Operating Procedure for SIAM Liaison to the IEEE Conferences on Decision and Control (CDC)

#### **I. Executive Summary**

Whereas the IEEE Conference on Decision and Control (CDC) has benefitted from collegial involvement of SIAM over many years, and whereas SIAM has benefitted from the additional exposure of its intellectual property that has been afforded by CDC, this memorandum seeks to reaffirm the interest of both parties in continuing SIAM's sponsorship and participation in the CDC.

The essential points covered by this memorandum are:

1. Each year, SIAM will contribute a number of papers to be presented at CDC.
2. These papers will be identified in the CDC Program and conference record as "SIAM Papers".
3. SIAM is listed as a sponsoring organization on conference publications and on the conference website.
4. SIAM members pay the same conference registration fee as CSS members.
5. There is no requirement of having papers grouped into a SIAM Session.

#### **II. History. SIAM participation in IEEE CDC's**

The IEEE CDC is the annual conference of the IEEE Control Systems Society (CSS). SIAM has been a co-sponsor of these conferences going as far back as 1974 or before.

This co-sponsorship does not include any financial arrangements or agreements. SIAM participation typically consists of the following.

1. Allowing the CSS to use the SIAM logo on its advertisements for the CDC's.
2. Publicizing the CDC's in the SIAM Newsletter.
3. Providing addresses of subsets of the SIAM members, typically of those members that subscribe to the SIAM Journal on Control and of those members who are also members of the SIAM Activity Group on Control Theory (SIAGCT).
4. SIAM "sponsorship" of selected papers at the CDC's.



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The co-sponsorship relationship does not need to be renewed each year, but the relationship can be revisited at any time if either the CSS or SIAM wishes to discuss changes.

Items 1 through 3 do not require any additional explanation. The remainder of the memo concentrates on item 4.

### III. SIAM-sponsored Papers at IEEE CDC's

The IEEE CDC's are typically held in December of each year and the following schedule of events is based upon a December date.

1. By August of the year preceding a given CDC, the SIAGCT Chair must propose a SIAM member to serve as the SIAM Liaison to the Program Committee of that CDC. This Liaison must be someone who is regarded as qualified, and hence approved, by the Program Chairman of that CDC.

2. The Liaison, in consultation with the Program Chair, will form a review committee to evaluate SIAM contributed papers.

3. One year before the CDC (usually in November) the SIAM Liaison requests, from the SIAM headquarters in Philadelphia, a list of the papers accepted for publication or electronically published in SIAM Journal on Control and Optimization (SICON) over the last year. (This request could be enlarged to include any paper accepted for publication/electronically published in one of the other SIAM journals that might be relevant to that particular CDC.). From this list the SIAM Liaison (possibly in conjunction with whomever else the Liaison feels appropriate, with the exception of the members of the review committee) selects in December-early January a subset of these papers as candidates for SIAM contributions at the CDC.

4. At the beginning of January an invitation letter is sent to the authors of the subset of papers selected. This letter includes information on the next CDC and details of the rules and regulations regarding SIAM sponsorship of the paper at the CDC. These rules are listed in (5) below.

Authors are requested to submit their manuscript to the CDC Submission site, according to the Instructions available on the CDC web site for regular paper submissions and within the first submission deadline, by designating their manuscript as a SIAM paper.

5. Rules for Sponsorship of Papers. These must be included in the letter of invitation to potential SIAM authors.

a. Each of the selected SIAM-sponsored papers proposed for presentation at a CDC undergoes a peer-review process handled by the SIAM Liaison for that specific CDC. Two or three reviews will be provided for each paper by the members of the review committee. Decisions about SIAM papers acceptance/rejection will be taken at the final CDC Program Committee meeting, and accepted papers will be integrated in the final CDC program.

b. The final versions of SIAM papers that appear in the CDC Proceedings must be in compliance with normal CDC page limits.

c. The IEEE will hold the copyright of all papers appearing in the CDC Proceedings. SIAM will hold the copyright of all papers published in SICON. Both the CSS and SIAM recognize that material in the SIAM papers published in the CDC Proceedings is considered to be "reused with permission," and by this memo the IEEE is granted the right to reprint this material.

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d. In the CDC papers authors are required to cite the SICON version, and to explain how the two versions differ. For papers accepted by SIAM but not yet published, it is also desirable to have the CDC submission referenced, with an explanation of how the two papers differ.

e. SIAM is not able to provide any financial support to SIAM-sponsored authors. SIAM authors must agree in advance to pay the CDC registration fee and attend the conference to present their contribution before their papers can be recommended by SIAM.

6. Accepted SIAM-sponsored papers are assigned to relevant sessions by the Program Committee. There is no requirement that a complete session made out of the SIAM papers be created.

7. Letters of acceptance for all the conference papers, including the accepted SIAM papers are sent out by the CDC Program Committee Chairman, telling the authors what sessions their papers are in, length of their talks, and giving final submission guidelines.

8. The final submission procedures will be the same as for all other CDC papers, and authors of accepted SIAM papers must register for the conference and upload the final versions of their papers on the CDC submission site.

For the IEEE Control Systems Society:

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Tariq Samad, President

IEEE Control Systems Society

For the Society of Industrial and Applied Mathematics:

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James M Crowley, Executive Director

Society of Industrial and Applied Mathematics

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### APPENDIX D. LETTER TO PC MEMBERS

Dear NAME,

As a member of the Program Committee (PC) of the **51<sup>st</sup> IEEE Conference on Decision and Control (CDC)**, (10-13 December 2012, Maui, Hawaii), I would like to update you about the current situation.

\* The first submission round of review, carried on by the Conference Editorial Board (CEB) members, is almost over, and at the end of this week we expect to have a recommendation for each paper. In the average each paper received three independent reviews, but of course there are exceptions and a few problematic cases.

\* Next week each of you will receive either one or two invited sessions (in a few exceptional cases three) and some regular papers to handle. The total workload will not exceed 20 papers.

\* You will be asked to evaluate, for each of the papers that have been assigned to you, both the reviews/recommendations and the rates obtained in the first round of review. In your workspace you can confirm the final AE rate or amend it; confirm the AE report or suggest a revised version; recommend acceptance or rejection.

\* In critical cases (and only if the number of reviews obtained for a paper is **less than 3**) you can search for **one** additional review. If so, you will have to get in touch with Alessandro Astolfi ([a.astolfi@imperial.ac.uk](mailto:a.astolfi@imperial.ac.uk)), the CEB Chair, to be able to send out a review request. Note that the review must be obtained in a very strict time frame, reasonably a week.

\* Finally, you should provide recommendations about the invited sessions acceptance/rejection.

The deadline for submitting all the recommendations is **\*\*\*JUNE 15\*\*\***, but we would very much appreciate if you could immediately submit recommendations for what you regard as easy cases (for instance acceptance of an invited paper that has been rated A or B+ and have homogeneous reviews).

Next week Thomas Parisini ([t.parisini@gmail.com](mailto:t.parisini@gmail.com)), as Vice Program Chair for the Invited Session, will get in touch with each of you individually to provide you with further information about the invited sessions you are considering.

Of course, I am available for any further information you may need.

I sincerely thank you for your precious help, and send you my best wishes

Elena Valcher  
IEEE CDC 2012 Program Chair

### APPENDIX E. LETTER TO DISTINGUISHE CEB AES

Dear NAME

with this message I would like to sincerely thank you for your excellent work as CEB Associate Editor.

At the end of the review process handled by the CEB, I have personally checked all the AEs and reviewers' rates and reports for the regular papers, to flag possible critical cases, and possibly forward them to the Program Committee for further evaluation.

In this way, I have had the opportunity to see how careful your work has been and how competent and professional you have been in dealing with conflicting reviews, where I have seen you taking a firm stand with a clear and detailed report. Your excellent work has made mine much easier and I would like to warmly thank you for this.

Unfortunately, I have no means to show you my gratitude but sending you this letter, that will be sent out only to 7 of the 151 CEB Associate Editors.

My most sincere thanks and best regards

Elena  
CDC 2012 Program Chair

## 51ST IEEE CDC FINAL REPORT TO IEEE CSS BOG: APPENDIX I

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### APPENDIX F. NUMBER OF SUBMISSIONS/ACCEPTANCES/WITHDRAWALS

Type of Papers	Submitted	Withdrawn before Final Decision	Rejected	Accepted	Withdrawn after having been accepted	Final version received
Invited Papers	484 (100%)	3	158 (32.64%)	323 (66.73%)	2	321
Regular Papers	1866 (100%)	13	920 (49.3%)	933 (50%)	14	919
SIAM Regular Papers	13 (100%)	0	2 (15.38%)	11 (84.62%)	1	10
Total submitted papers (not tutorial)	2363 (100%)	16	1080 (45.7%)	1267 (53.62%)	17	1250
Tutorial Papers	7	0	0	7	0	7

## 51ST IEEE CDC FINAL REPORT TO IEEE CSS BOG: APPENDIX II

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### Appendix II.

This appendix contains two tables listing the persons who receive VIP (complementary registration to the conference, along with the reason why.

All persons listed in the following table were offered complementary registration (were on the VIP list in Paperplaza). They all registered for the conference. If the final column contains "CSS" then the registration was billed back to IEEE CSS.

First Name	Last Name	Reason
Jay	Farrell	CDC Op Comm
Elena	Valcher	CDC Op Comm
Thomas	Parisini	CDC Op Comm
Andy	Teel	CDC Op Comm
Laura	Menini	CDC Op Comm
Luca	Zacharian	CDC Op Comm
Warren	Dixon	CDC Op Comm
Gurdal	Arslan	CDC Op Comm
Alessandro	Astolfi	CDC Op Comm
Sandra	Hirche	CDC Op Comm
Rajesh	Rajamani	CDC Op Comm
Jagannathan	Sarangapani	CDC Op Comm
Ann	Rundell	CDC Op Comm
Hong	Chen	CDC Op Comm
Pradeep	Misra	CDC Paperplaza
Baird	Randal	CDC Opcomm
Jessy	Grizzle	IEEE CSS Bode lecture
Kameshwar	Polla	CDC Plenary
Magnus	Egerstedt	CDC Semiplenary
Mustafa	Khammash	CDC Semiplenary
John	Lygeros	CDC Semiplenary
Mario	Sznaier	CDC Semiplenary
Alberto	Isidori	IEEE CSS Award
Jean	Walrand	IEEE Award Koji Kobayashi Computers and Communication Award
Masimo Franceschetti	The Ruberti prize	IEEE CSS awards
Norman Schweitzer	Outstanding Chapter Award	IEEE CSS Award
Roberto Tron	Best paper in CDC	IEEE CSS Award
Dejan Kihias	Corporate Award	IEEE CSS Award

## 51ST IEEE CDC FINAL REPORT TO IEEE CSS BOG: APPENDIX II

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By IEEE CSS bylaws, all past IEEE CSS Presidents receive VIP registration. This is implemented by placing their names on the VIP list in Paperplaza so that if they register, they receive no charge. Due to the human labor involved, we entered all names back to 1995 (Derek Atherton), and then added additional names at the request of the people involved. The registrations for all past presidents who register is charged back to IEEE CSS at the advanced member registration rate.

Moshe Kam (IEEE President) was also on the VIP list, but did not register or attend.

Christos	Cassandras	CSS President
Rick	Middleton	CSS President
Roberto	Tempo	CSS President
Tariq	Samad	CSS President
David	Castanon	CSS President
Ted	Djaferis	CSS President
John	Bailieul	CSS President
Mark	Spong	CSS President
Doug	Birdwell	CSS President
Len	Shaw	CSS President
Jack	Rugh	CSS President
Tamer	Basar	CSS President
Steve	Yurkovich	CSS President
Harris	McClamroch	CSS President
Panos	Antsaklis	CSS President
Derek	Atherton	CSS President
Abe	Haddad	CSS President
Bill	Levine	CSS President
Edward	Davison	CSS President
Stephen	Kahne	CSS President
Moshe	Kam	IEEE President

# 51<sup>st</sup> IEEE Conference on Decision and Control



December 10-13, 2012  
Grand Wailea, Maui, Hawaii  
<http://control.disp.uniroma2.it/CDC2012/>



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## Invitation

The 51<sup>st</sup> IEEE Conference on Decision and Control will be held Monday through Thursday, December 10-13, 2012 at the Grand Wailea, Maui, Hawaii.

### Technical workshops are on Friday, December 14, 2012.

The CDC is recognized as the premier scientific and engineering conference dedicated to the advancement of the theory and practice of systems and control. The CDC annually brings together an international community of researchers and practitioners in the field of automatic control to discuss new research results, perspectives on future developments, and innovative applications relevant to decision making, automatic control, and related areas.

The 51st CDC will feature contributed and invited papers, as well as invited tutorial sessions and workshops.

The IEEE CDC is hosted by the IEEE Control Systems Society (CSS) in cooperation with the Society for Industrial and Applied Mathematics (SIAM), the Institute for Operations Research and the Management Sciences (INFORMS), the Japanese Society for Instrument and Control Engineers (SICE) and the European Union Control Association (EUCA).

Maui, the Valley Isle, is the second largest island in the Hawaiian chain, providing diverse cultures, climates, and landscapes: from the black, white, red, and gold sand beaches to the pastoral village of Heavenly Hana, to the soaring sea cliffs and seven sacred pools. The Grand Wailea is located on Maui's sunny south shore. The hotel offers state of the art meeting facilities, spans over 40 acres, and has a prime oceanfront location on spectacular Wailea Beach. Wailea beach is famous for calm clear blue water, miles of beach front walking, sunsets and whale watching. While at the conference, enjoy the distinctive restaurants, art collection, tropical gardens, swimming pools and waterfalls. Dining choices are available on-site, at several nearby hotels, at the adjacent Wailea Shopping Center and in Kihei.

## Important Dates (2012):

Notification of acceptance/rejection: **end of July**

Final submission and on-line registration site opens: **August 1**

Deadline for final submissions: **September 5**



# 51st IEEE Conference on Decision and Control



December 10-13, 2012  
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## Post-Conference Workshops on Friday, December 14, 2012

**Identification, Analysis and Design of Biological Networks.** Elisa Franco, Gabriele Lillacci, Abhyudai Singh, Brian Munsky

**Robust Guaranteed Cost Control for 2-D Nonlinear Systems Based on General-type T-S Fuzzy Model.** Lizhen Li, Weiqun Wang, Xiaofeng Li

**Control Architecture for Discrete-Event Dynamic Systems: From Monolithic to Distributed and to Heterarchical.** Kai Cai, Rong Su, Klaus Werner Schmidt, Lei Feng

**Control and Power Electronics for Renewable Energy and Smart Grid Integration.** Qing-Chang Zhong

**Guidance, Navigation and Control Applications in the Aerospace Industry Current Problems and Modern Solutions - A Workshop Sponsored by the IEEE Technical Committee on Aerospace Controls** – Richard A. Hull, Zhihua Qu, Richard Scott Erwin, James M. Buffington, Naira Hovakimyan, Gokhan Inalhan, Clinton Plaisted, D. Brett Ridgely, Kevin A. Wise

**Optimization Based Control: Methods and Applications.** Rui Huang, Le Xie, Lorenz T. Biegler, Jay H. Lee, Draguna Vrabie

**Identification of Parameter Varying and Nonlinear Systems Via Linear Subspace Methods.** Wallace E. Larimore

**Predictive Control for Embedded Systems: State of the Art and Future Challenges.** Rolf Findeisen, Colin Neil Jones, Moritz Diehl, Eric C. Kerrigan, Martin Monnigmann, Georgios Papafotiou

**Enabling Secure, Scalable Microgrids with High Penetration Renewables.** David G. Wilson, Rush Robinett, Gordon G. Parker, Steven Goldsmith

**Intelligent Planning and Control: Bringing Together Adaptive Control and Reinforcement Learning for Guaranteeing Optimal Performance and Robustness.** Girish Chowdhary, Tansel Yucelen, Eric N. Johnson, Frank L. Lewis, Alborz Geramifard, Jonathan P. How

**Control Systems in the Open World: Novel Mathematical Representations for Interaction.** Shankar Sastry, Ruzena Bajcsy, Samuel Burden, Humberto Gonzalez, Ramanarayan Vasudevan

**Traffic Modeling and Estimation Beyond Smartphones: Algorithms for Urban Computing.** Alexandre M. Bayen, Christian Claudel, Daniel B. Work, Sebastien Blandin, Aude Hofleitner

**Robust and Stochastic Control Methods for Sustainable Engineering.** Anil Aswani, Claire J. Tomlin

**Opportunities and Challenges in Developing a Cyber Physical Solution for Energy Efficient Buildings.** Prabir Barooah

## Plenary Lectures

### Jessy Grizzle

University of Michigan, Ann Arbor  
Bode Lecture: *Highly Agile and Robust Robotic Bipedal Locomotion Through Nonlinear Geometric Control*

### Kameshwar Poolla

University of California, Berkeley  
Plenary lecture:  
*The Grid with Intelligent Periphery*

## Semi-Plenary Lectures

### Magnus Egerstedt

Georgia Institute of Technology  
*Control of Multi-Robot Systems: From Formations to Human-Swarm Interactions*

### Mario Szaier

Northeastern University  
*Taming the Upcoming Data Deluge: A Systems and Control Perspective*

### John Lygeros

Swiss Federal Institute of Technology (ETHZ)  
*Estimation and Identification of Population Systems*

### Mustafa Khammash

Swiss Federal Institute of Technology (ETHZ)  
*Cyborg Cells: Feedback Control of Cell Populations*

## Tutorial Sessions

### Control of Nonlinear Delay Systems

Miroslav Krstic,  
Nikolaos Bekiaris-Liberis

### Event-triggered and Self-triggered control

Paulo Tabuada,  
W.P.M.H. Heemels,  
Karl H. Johansson

### Fundamentals of Economic Model Predictive Control

James B. Rawlings,  
David Angeli

### Information Structures in Optimal Decentralized Control

Nuno C. Martins, Michael  
C. Rotkowitz, Serdar  
Yuksel, Aditya Mahajan

### Synchronization in Coupled Oscillators: Theory and Applications

Francesco Bullo,  
Rodolphe J. Sepulchre,  
Murat Arcak

## Important Dates (2012):

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Final submission and registration open: **August 1**  
Final submissions due: **September 5**