

Professor Ernest Bruce Lee

Prof. Ernest Bruce Lee, the Vincentine Hermes-Luh Chair of Electrical and Computer Engineering and a University of Minnesota Institute of Technology Distinguished Professor, passed away peacefully on the morning of 15 April 2005, surrounded by his loved ones, after a long and valiant battle with cancer. He was 73 years old.

Bruce Lee grew up in the East Gull Lake area near Brainerd, Minnesota. He enjoyed doing carpentry work with his brothers at his family's country home, as well as hunting and fishing in the surrounding lakes and woods. An outstanding student, he excelled at mathematics. He was a star player on his basketball and football teams in both high school and junior college. In 1953, he met his future wife Judith at a sledding party. They married in 1954 and started their family while Bruce finished college.

Bruce studied mechanical engineering, earning the B.S. degree in 1955 and the M.S. degree in 1956 from the University of North Dakota. He received the Ph.D. from the University of Minnesota in 1960. He was with Honeywell, Inc. as a senior research engineer from 1956–1963, at which time he joined the University of Minnesota as an associate professor of electrical engineering. He was promoted to the rank of full professor in 1966. Bruce served as the acting head of the Department of Computer Science from 1969–1970, as the head of the Department of Electrical Engineering from 1976–1982, and again as the acting head of the Department of Electrical Engineering from 1983–1984. He was a founder of the Center for Control Science and Dynamical Systems and was its codirector for many years. His other appointments included visiting engineer at RIAS in Baltimore (1961–1962), visiting professor at Caltech (1968), senior visiting fellow at the Science Research Council in England (1968–1972), and visiting professor at the Technical University of Warsaw (1976–1979), at the Université de Montreal, Canada (1978), and the University of Florida (1983).

Prof. Lee was long the leader of the Systems and Controls Group in the Department of Electrical Engineering,

and the strength of his reputation in this area helped attract some of the most outstanding control scientists and engineers in the world to Minnesota. It also helped forge collaborations with faculty and students in several of the departments at the school. These departments include Mathematics, Mechanical Engineering, Chemical Engineering, Aerospace Engineering, and Computer Science.

As a leading educator and scholar in systems and controls, Prof. Lee supervised over 50 Ph.D. dissertations and numerous master's theses. His book, *Foundations of Optimal Control Theory* (Wiley, 1967), coauthored with L. Markus, is a classic in systems and control and is considered one of the most influential textbooks in this area. The text has been translated into Russian and Japanese. Prof. Lee's additional professional recognitions include election as a Fellow of the IEEE in 1983 and election as a Foreign Member of the Polish Academy of Sciences in 2000. He has received the Warsaw University of Technology Medal for the development of control theory and establishment of cooperative research with Polish scientists.

Bruce Lee was a devoted family man and a strong, quiet, and patient father and teacher. He guided his children and his students with a gentle and tolerant soul. Throughout his life, he led and taught by example. He had a wonderful sense of humor and loved nothing more than having friends and family over for get-togethers. In his spare time, he liked to move boulders, snow, and soil. He was a skilled craftsman with native woods. His other interests included astronomy, space travel, meteorites, sea shells, volcano dynamics, and interesting "smelly" foods from around the world. He was a kind, noble, talented, and gentle man. He loved animals, children, and the outdoors. Most of all, he loved his work, his family, friends, and students and dedicated his successful life to all four. Bruce Lee will be missed by many around the world. Few such quiet and gentle people have had such a positive impact on the world as Bruce did throughout his life.

