Daniel J. Rudolph, professor of mathematics, died from ALS Feb. 4

February 10, 2010


Dan graduated from Fort Collins High School in 1968, and earned a bachelor's degree from the California Institute of Technology in 1972 and a doctorate from Stanford University in 1975. After four years of post-doctoral work and an assistant professorship at Stanford, he joined the University of Maryland in 1981 as a tenured professor.

Joined CSU in 2005

A brilliant mathematician and a native of Fort Collins, he joined the faculty of Colorado State University in 2005, as the first recipient of the Albert C. Yates Endowed Chair in Mathematics in the College of Natural Sciences. CSU was the university his father and numerous other relatives attended.

Rudolph's passion for mathematics was matched by a generosity of spirit and commitment to community which motivated educational work at a level uncommon for a leading researcher. At the University of Maryland, he served as chair of the graduate program and of the department. He supervised numerous Ph.D. students, and inspired many more.

Improved calculus program

Rudolph was a leader in establishing an improved calculus program with special attention to minority students. He founded and directed a program which brought minority students to campus for intensive research experience in preparation for graduate school.

Rudolph collaborated with other faculty at Colorado State on various outreach programs to local schools from K through 12; and organized a Math Circle for girls at Junior Preston High School with the goal of introducing young students to advanced mathematical ideas. At CSU, in addition to his teaching and his supervision of Ph.D. students, he began a Mathematical Circles outreach program for outstanding middle school students.

World leader on ergodic theory

Rudolph was one of the world leaders in the mathematical area of ergodic theory, and more broadly dynamical systems. Dynamical systems model processes of change and evolution. Ergodic theory focuses on statistical and probabilistic aspects of these systems, which are essential to finding order and structure in chaos.

Rudolph authored two books and more than 70 research articles. He was a speaker at two meetings of the International Congress of Mathematicians. His most recent publication will appear in the Annals of Mathematics and culminates eight years of his work in dynamical systems.

Rudolph was a devoted husband and father and is survived by his wife, Michelle; children, Beatrice (16), Jonah (13), and Layton (10); brother, James (and partner, Kathleen Bristol) of Moss Beach, Calif.; and mother-in-law, Elaine Hyde. He was preceded in death by his parents, William F. and Johnalou Rudolph;
brother, Gregory and wife, Kristin and their children, Lisa and Scott.

Memorial gathering Feb. 13
Memorial gathering will be held 11 a.m. Saturday, Feb. 13, at the CSU Student Center, North Ballroom. In lieu of flowers, contributions may be made in Daniel's memory to Michelle Rudolph (for an education fund for the children); Haiti Relief thru the Red Cross; or the ALS Association, Rocky Mountain Chapter at alscolorado.org.

Please visit www.allnutt.com to send condolences to the family.

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