Bigelow and Lindenstrauss Receive Blumenthal Prize

The Leonard M. and Eleanor B. Blumenthal Award for the Advancement of Research in Pure Mathematics has been awarded to Stephen J. Bigelow of the University of Melbourne and Elon B. Lindenstrauss of Stanford University and the Institute for Advanced Study. The awards were presented at the Joint Mathematics Meetings in New Orleans in January 2001.

Stephen Bigelow was born in September 1971 in Cambridge, England. He received his B.S. degree in 1992 and his M.S. degree in 1994, both from the University of Melbourne. He recently received his Ph.D. from the University of California at Berkeley, where he wrote a dissertation solving a long-standing open problem in the area of braid groups. Braid groups play central roles in various aspects of low-dimensional topology, algebra, and algebraic geometry. These groups can be viewed geometrically as the fundamental groups of the plane with some number of punctures, or they can be given algebraically in terms of generators and some simple relations. There were no known faithful, linear finite-dimensional representations except for a few special cases with low braid number. The existence of such representations stood for years as an outstanding unsolved problem, which Bigelow has now solved affirmatively. Bigelow has given many invited talks and has been the recipient of a Fulbright Scholarship.

Elon Lindenstrauss was born in Jerusalem, Israel, in 1970. He received his Ph.D. from the Hebrew University of Jerusalem in 1999. His work relates to the so-called “mean topological dimension”, a notion introduced by M. Gromov in the study of dynamical systems of infinite topological dimension and entropy. Lindenstrauss used this invariant to settle several questions in topological dynamics. In particular, he solved a problem on nonembeddability of minimal systems in $[0, 1]^Z$ and proved an analogue for mean dimension of the Ornstein isomorphism theorem. Other contributions include the isomorphism of ergodic measurable distal systems to minimal topological distal systems with an invariant Borel measure of full support and pointwise ergodic theorems for amenable groups. While at the Hebrew University, Lindenstrauss received Hebrew University’s Rector Prize on three separate occasions, the Yashinski Prize for Excellence in Graduate Studies, and the Kennedy-Lee Prize for his Ph.D. thesis.

The Leonard M. and Eleanor B. Blumenthal Trust for the Advancement of Mathematics was created for the purpose of assisting the Department of Mathematics of the University of Missouri at Columbia, where Leonard Blumenthal served as professor for many years. Its second purpose is to recognize distinguished achievements in the field of mathematics through the Leonard M. and Eleanor B. Blumenthal Award for the Advancement of Research in Pure Mathematics, which was originally funded from the Eleanor B. Blumenthal Trust upon Mrs. Blumenthal’s death on July 12, 1987.

The Trust, which is administered by the Financial Management and Trust Services Division of Boone County National Bank in Columbia, Missouri, pays its net income to the recipient of the award each year for four years. An independent committee selects the winner(s), restricting its attention to work published between eight years and one year before the date the award is presented. The recipient accepts the award in person and presents an address on the research for which he or she received the award.

—Allyn Jackson

Deaths

Ernest Jose Cisneros, of Lakewood, CO, died on November 10, 2000. Born on June 2, 1937, he was a member of the Society for 12 years.

Walter Felscher, of Tübingen, Germany, died on December 9, 2000. Born on October 12, 1931, he was a member of the Society for 37 years.

Robert R. Hare, professor emeritus, North Dakota State University, Fargo, died on November 15, 2000. Born on February 23, 1925, he was a member of the Society for 48 years.

Rogerio Silva Sousa Nunes, of the University Portucalense, Portugal, died in February 2000. Born on October 8, 1920, he was a member of the Society for 23 years.

Paul Rees, professor emeritus, Louisiana State University, Baton Rouge, died in November 2000. Born on June 10, 1902, he was a member of the Society for 76 years.