
Mathematics People

Fedkiw Receives NAS Award for Initiatives in Research

RONALD FEDKIW of Stanford University has been awarded the National Academy of Sciences (NAS) Award for Initiatives in Research. He has been honored for “his many innovations in the modeling and numerical simulation of flows and his pioneering contributions to physically based computer graphics.”

The award carries a cash prize of \$15,000 and is awarded annually to recognize innovative scientists under thirty-five years old and to encourage research likely to lead toward new capabilities for human benefit. The prize alternates among the fields of physical sciences, engineering, and mathematics.

—From an NAS announcement

Hughes Receives AAAS Lifetime Mentor Award

RHONDA J. HUGHES of Bryn Mawr College has been named the recipient of the 2004 AAAS Lifetime Mentor Award of the American Association for the Advancement of Science (AAAS). She has helped fifty-seven women and minority students earn graduate degrees in mathematics, including seventeen at the doctoral level.

Hughes and Sylvia Bozeman of Spelman College developed the Spelman-Bryn Mawr Summer Mathematics Program and the Enhancing Diversity in Graduate Education (EDGE) Program, both designed to help young women through college and graduate school. Hughes is a former president of the Association for Women in Mathematics.

The AAAS Mentor Award for Lifetime Achievement honors AAAS members who have mentored and guided significant numbers of underrepresented students toward a Ph.D. degree in the sciences. The recipient receives \$5,000 and a commemorative plaque.

—From an AAAS announcement

Lander Receives Public Understanding Award

The American Association for the Advancement of Science (AAAS) has named ERIC S. LANDER to receive its Public Understanding of Science and Technology Award for 2004.

Lander is the founding director of the newly created Broad Institute of the Massachusetts Institute of Technology and of Harvard University. He was cited by AAAS “for his excellence in communicating complex scientific ideas, and their implications for society, to the general public and policy-makers, while actively engaged in a demanding and aggressive research program.”

A former Rhodes scholar, Lander earned his undergraduate degree in mathematics with highest honors from Princeton University in 1978 and then received his Ph.D. in mathematics from Oxford University in 1981. His honors and awards include a MacArthur Fellowship in 1987. He was elected a member of the U.S. National Academy of Sciences in 1997 and the U.S. Institute of Medicine in 1999.

The AAAS Award for Public Understanding of Science and Technology, established in 1987, recognizes scientists and engineers who make outstanding contributions to the popularization of science. It carries a monetary prize of \$5,000.

—From an AAAS news release

Boyd Awarded CRM-Fields Prize

DAVID BOYD of the University of British Columbia has been awarded the 2005 CRM-Fields Prize. The prize, awarded annually by the Centre de Recherches Mathématiques (CRM) in Montreal and the Fields Institute in Toronto, recognizes exceptional contributions by a mathematician working in Canada. The prize carries a cash award of 5,000 Canadian dollars (approximately US\$3,850), and the recipient is expected to present a lecture at the CRM and at the Fields Institute.

Boyd was recognized for seminal contributions to analytic number theory, particularly his explorations of the deep connections between the Mahler measure of polynomials and special values of their associated L -functions.

Boyd received his B.Sc. from Carleton University in 1963 and his M.A. in 1964 and Ph.D. in 1966 from the University of Toronto. He has taught at the University of Alberta and the California Institute of Technology. He has been teaching at the University of British Columbia since 1971 and is currently a full professor. Boyd is a fellow of the Royal Society of Canada. His awards include the E. W. R. Steacie Prize and both the Coxeter-James and Jeffery-Williams prize lectureships of the Canadian Mathematical Society (CMS). His service to the Canadian mathematical community includes terms as vice president of the CMS, as chair of the NSERC mathematics grant selection committee, and as acting director of the Pacific Institute for the Mathematical Sciences.

The CRM and the Fields Institute established the CRM-Fields prize in 1994 to recognize exceptional research in the mathematical sciences. Previous recipients of the prize are H. S. M. (Donald) Coxeter, George A. Elliot, James Arthur, Robert V. Moody, Stephen A. Cook, Israel Michael Sigal, William T. Tutte, John B. Friedlander, John McKay, Edwin Perkins, and Donald A. Dawson.

—From a Fields Institute announcement

AIM Five-Year Fellow Announced

JOEL KAMNITZER of the University of California, Berkeley, has been named the recipient of the 2005 American Institute of Mathematics (AIM) Five-Year Fellowship.

Kamnitzer will receive his Ph.D. in 2005 from Berkeley. His research interests include algebraic geometry, representation theory, and combinatorics. His thesis, titled “Mirkovic-Vilonen cycles and polytopes”, gives a combinatorial description of a family of varieties arising in geometric representation theory. The fellowship will provide sixty months of full-time research, as well as funds for travel and equipment.

The runners-up for the AIM Fellowship are Spyros Alexakis (Princeton University), Beth Samuels (Yale University), Lior Silberman (Princeton University), and Lauren Williams (Massachusetts Institute of Technology).

—From an AIM announcement

Packard Fellowships Awarded

The David and Lucile Packard Foundation has awarded sixteen Fellowships for Science and Engineering for the year 2004. Two mathematical scientists were among the awardees.

MANJUL BHARGAVA of Princeton University and ALEXANDRU D. IONESCU of the University of Wisconsin, Madison, will each

receive an unrestricted research grant of \$625,000 over five years.

The fellowships are awarded to researchers in mathematics, natural sciences, computer science, and engineering who are in the first three years of a faculty appointment.

—From a Packard Foundation announcement

Maz'ya Awarded Celsius Gold Medal

VLADIMIR MAZ'YA of the Ohio State and Liverpool Universities received the Celsius Gold Medal of the Royal Society of Sciences of Uppsala on August 31, 2004. The citation states that Maz'ya received the medal “for his outstanding research in partial differential equations and hydrodynamics”.

Maz'ya authored more than four hundred papers and fifteen books in various branches of pure, applied, and numerical analysis. In particular, as early as 1960 he discovered the equivalence of Sobolev embeddings and isoperimetric/isocapacitary inequalities, which had great impact on further development on the theory of function spaces, spectral theory, and differential geometry. In 1968 he constructed counterexamples related to the nineteenth and twentieth Hilbert problems. He solved F. John's problem on time-harmonic waves above a submerged body in 1978. Recently he found regularity criteria of Wiener's type for higher order elliptic equations.

The Royal Swedish Society was founded in 1710 and is the oldest scholarly society in Sweden. The Gold Medal is the Society's highest award and was initiated in 1960. It is awarded every two years in different areas of science, going to a mathematician every sixth year. Among previous recipients in the mathematical sciences are L. Carleson, L. Hörmander and J. Peetre.

—from a Royal Society of Sciences of Uppsala announcement