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# Mathematics People

## SIAM Prizes Awarded

The Society for Industrial and Applied Mathematics (SIAM) awarded several prizes at recent meetings.

The SIAM Conference on Applications of Dynamical Systems was held in Snowbird, Utah, from May 28 through June 1, 2007. LAI-SANG YOUNG of the Courant Institute of Mathematical Sciences, New York University, was awarded the AWM-SIAM Sonia Kovalevsky Lectureship for her fundamental contributions in the field of ergodic theory and dynamical systems. Her pioneering research has had a significant impact in the investigation of dynamical complexity, strange attractors, and probabilistic laws of chaotic systems. The lectureship is intended to highlight significant contributions of women to applied or computational mathematics.

SALVATORE TORQUATO of the Princeton Institute for the Science and Technology of Materials, Princeton University, was awarded the Ralph E. Kleinman Prize for his contributions to the modeling, analysis, and computational study of heterogeneous materials.

ANDREW STUART of the University of Warwick received the J. D. Crawford Prize of the SIAM Activity Group on Dynamical Systems (SIAG/DS) for his contributions to the fields of stochastic ordinary and partial differential equations, including mathematical theory, algorithm development, and the application of stochastic differential equations to physical models and the dynamics of inertial partials in random fields. The prize is awarded for recent outstanding work on a topic in nonlinear science, including dynamical systems theory and its applications, as well as experiments and computations/simulations.

HARRY L. SWINNEY of the University of Texas, Austin, was awarded the Jürgen Moser Lectureship of the SIAG/DS for his elegant and incisive laboratory experiments that have elucidated the nonlinear dynamics of systems far from equilibrium.

The SIAM Conference on Control and Its Applications was held in San Francisco in July 2007. HÉCTOR J. SUSSMANN of Rutgers University was awarded the W. T. and

Idalia Reid Prize for his fundamental contributions to nonlinear control, especially in the area of differential-geometric control theory. The prize is awarded for research in or other contributions to the broadly defined areas of differential equations and control theory.

MURAT ARCAK of the Rensselaer Polytechnic Institute received the SIAM Activity Group on Control and Systems Theory Prize for his fundamental contributions to the study of large networked systems and for his accomplishments in developing a novel passivity approach to large-scale networks, such as communication, power, and biological systems, and deriving fundamental results for increasing their robustness and performance.

—From a SIAM announcement

## Prizes of the London Mathematical Society

The London Mathematical Society (LMS) has awarded several prizes for 2007.

BRYAN BIRCH of the University of Oxford has been awarded the De Morgan Medal in recognition of his influential contributions to modern number theory. Birch worked with Peter Swinnerton-Dyer of the University of Cambridge to create a new area of arithmetic algebraic geometry, formulating the Birch–Swinnerton-Dyer conjectures. These conjectures are among seven classic unsolved mathematical problems identified by the Clay Mathematics Institute in Cambridge, Massachusetts, for proofs of which the institute is offering US\$1 million prizes. In addition, Birch's work on Heegner points has led to huge advances in the arithmetic of elliptic curves.

BÉLA BOLLOBÁS of the University of Cambridge has been awarded the Senior Whitehead Prize for his fundamental contributions to almost every aspect of combinatorics. He has written a large number of research papers and influential textbooks, many of which have defined or redefined whole areas of research.

MICHAEL GREEN of the University of Cambridge received the Naylor Prize and Lectureship in Applied Mathematics in recognition of his founding work in superstring theory, which has dominated theoretical physics over the past twenty years. His contributions to the subject have profoundly influenced both pure and applied mathematics.

Four Whitehead Prizes were awarded. NIKOLAY NIKOLOV of the University of Oxford and Imperial College, London, was recognized for several important advances in group theory, especially in profinite groups and asymptotic aspects of arithmetic groups and finite simple groups. OLIVER RIORDAN of the University of Cambridge was honored for his contributions to graph polynomials, random graphs, extremal combinatorics, models of large-scale real-world graphs, and percolation theory. IVAN SMITH of the University of Cambridge was recognized for his work on symplectic topology, in which he often blends ideas from algebraic geometry and topology in novel ways. CATHARINA STROPPEL of the University of Glasgow was honored for her contributions to representation theory, in particular in the framework of categorifications and its applications to low-dimensional topology.

—From an LMS announcement

## Royal Society of Canada Elections

The following mathematical scientists have been elected to the Royal Society of Canada: DAVID C. BRYDGES, University of British Columbia; WALTER CRAIG, McMaster University; and LISA JEFFREY, University of Toronto at Scarborough. Chosen as a Specially Elected Fellow was PETER HACKETT of the Alberta Ingenuity Fund.

—From a Royal Society of Canada announcement

## News from the IMA

The Institute for Mathematics and its Applications (IMA) has announced the appointment of Fadil Santosa of the University of Minnesota as its next director. His appointment will begin on July 1, 2008. He will replace Douglas Arnold, who has been director since 2001 and who will remain a professor of mathematics at the University of Minnesota.

Santosa has taught at the University of Minnesota since 1995. He previously held positions at Cornell University and the University of Delaware. He currently serves as director of the Minnesota Center for Industrial Mathematics. He was associate director for industrial programs at the IMA from 1997 until 2001 and deputy director from 2001 to 2004. His research interests are in the areas of photonics, inverse problems, optimal design, and financial data analysis.

—From an IMA announcement



Mathematical Sciences Research Institute

## Deputy Director Associate Director

Applications are invited for the positions of **Deputy Director** and **Associate Director** at the **Mathematical Sciences Research Institute (MSRI)**, an independent research organization on the campus of the University of California in Berkeley. The appointments will be for a term of at least two years starting August 2008. For more information, see

<http://www.msri.org/about/jobs/ddad>

Applications will be considered starting Nov. 1, 2007.

MSRI is an equal opportunity employer.

Up to 1.65  
million EUR  
for Research  
in Germany



Alexander von Humboldt  
Stiftung/Foundation

## Sofja Kovalevskaja Award

*Supporting High-level, Innovative Research in  
Germany for Outstanding Scholars & Scientists*

One of the most generous research awards in Germany, this program is open to exceptionally promising junior researchers from all countries and disciplines. Applicants must have completed a doctoral degree with distinction within the past six years and have published in prestigious international journals or academic presses. The Alexander von Humboldt Foundation particularly welcomes applications from qualified, female junior researchers.

Funding enables winners to conduct independent research, to finance a research team at a German university or research institution of their choice, and to cover their living expenses in Germany. **Application deadline: January 4, 2008.**

Application materials and details are available at:

**[www.humboldt-foundation.de](http://www.humboldt-foundation.de)**