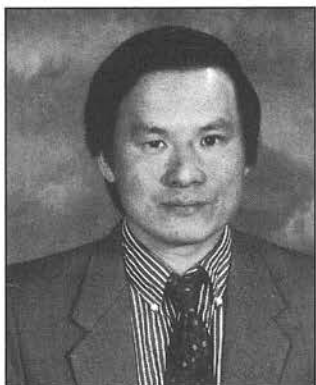# Mathematics People

2000 AMS Centennial Fellowships Awarded

The AMS has awarded four Centennial Fellowships for 1999–2000. The recipients are SIQI FU, CHRISTOPHER HERALD, WEI-DONG RUAN, and VASILY STRELA. The amount of the fellowship is currently $39,000, plus an expense allowance of $1,600.

Siqi Fu

Siqi Fu received his Ph.D. from Washington University in Saint Louis in 1994 under the direction of Steven G. Krantz. Fu was a visiting assistant professor at the University of California in Irvine and in Riverside and at Texas A&M University from 1994 to 1998. He has been an assistant professor at the University of Wyoming since 1998.

His research has been centered on several complex variables. He has worked on invariant metrics (e.g., the Bergman, Carathéodory, and Kobayashi metrics), domains with noncompact automorphism groups, and lately the $\bar{\partial}$-Neumann problem. His current research interests include compactness and spectral theory of the $\bar{\partial}$-Neumann problem, and behavior of the Bergman kernel functions and projections.

He plans to use the Centennial Fellowship to visit Princeton University and the University of California, Berkeley.

Siqi Fu

Christopher Herald

Christopher Herald received his Ph.D. in 1992 from the University of California, Berkeley, under the direction of Tomasz Mrowka. Herald has been a visiting assistant professor at the University of California, Irvine (1992–94), a Britton Postdoctoral Fellow at McMaster University (1994–96), and a visiting assistant professor at Swarthmore College (1994–97). He was also a visitor at the Max-Planck-Institut für Mathematik in Bonn (spring 1994). Since 1999 he has been an assistant professor at the University of Nevada, Reno.
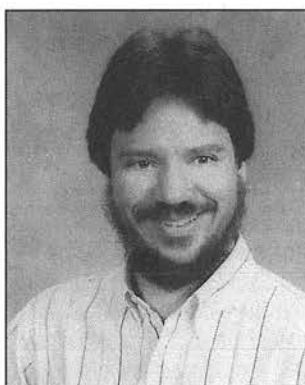
Christopher Herald

Herald's research area is gauge theory and invariants of knots and three-dimensional manifolds. These invariants include the Casson invariant, its generalizations, and Floer homology. One of his results gives a new interpretation of the equivariant (Tristam-Levine) signature of a knot in terms of the SU(2) representation variety of the knot group. Recently his work has been centered around generalizations of the Casson invariant of homology three-spheres to higher rank groups and their surgery properties.

He plans to use the Centennial Fellowship to visit Harvard University and the University of California, Berkeley.

Wei-Dong Ruan

Wei-Dong Ruan received his Ph.D. from Harvard University in 1995 under the supervision of Shing-Tung Yau. Ruan spent a year in Europe visiting the Institut des Hautes Études Scientifiques in France and Ruhr-Universität in Bochum, Germany. Since fall 1996 he has been a Ritt Assistant Professor at Columbia University. He will become an assistant professor at the University of Illinois at Chicago in the fall of 2000. Ruan plans to use the Centennial Fellowship to visit Harvard University and the Institute for Advanced Study in Princeton.

Wei-Dong Ruan

Ruan's research field is differential geometry. He studied the convergence and collapsing of Kähler manifolds and showed the contrast between the Kähler and the Riemannian cases. He also proved the C^∞ convergence of the Bergman metric using canonical coordinates for Kähler manifolds.

Ruan's recent work is on Lagrangian torus fibration of Calabi-Yau manifolds with application to mirror symmetry. He constructed a Lagrangian torus fibration for

Calabi-Yau hypersurfaces in toric varieties and proved the symplectic topological version of the Strominger-Yau-Zaslow mirror conjecture in this case. He plans to explore further the rich geometric structures revealed by this construction.

Vasily Strela

Vasily Strela received his Ph.D. in 1996 from the Massachusetts Institute of Technology under the supervision of Gilbert Strang. During 1996–99 Strela held postdoctoral and visiting positions at the University of South Carolina; Imperial College, London; and Dartmouth College. Since fall 1999 Strela has been an assistant professor at Drexel University.

Vasily Strela

His research interests include wavelet and multi-wavelet theory, signal processing, and financial mathematics. Recently he has been working on stochastic models of images and applications in noise removal. He plans to visit the Courant Institute of Mathematical Sciences at New York University and, for a short period, MIT.

Please note: Information about the competition for the 2001–2002 AMS Centennial Fellowships will be published in the "Mathematics Opportunities" section of an upcoming issue of the *Notices*.

—Allyn Jackson

Sloan Fellows Announced

The Alfred P. Sloan Foundation has announced the names of 104 outstanding young scientists and economists who have been selected to receive Sloan Research Fellowships. Grants of $40,000 for a two-year period are administered by each fellow's institution. Once chosen, fellows are free to pursue whatever lines of inquiry most interest them, and they are permitted to employ fellowship funds in a wide variety of ways to further their research aims.

More than four hundred nominations for the 2000 awards were reviewed by a committee of distinguished scientists. The mathematicians on the committee were George C. Papanicolaou, Stanford University; Peter Sarnak, Princeton University; and Ronald J. Stern, University of California, Irvine.

The Sloan Fellows in mathematics are: DAVID ADALSTEINSSON, University of North Carolina; DMITRY DOLGOPYAT, Pennsylvania State University; GIOVANNI FORNI, Princeton University; THOMAS H. GEISSER, University of Southern California; WILLIAM A. GRAHAM, University of Georgia; JAN HESTHAVEN, Brown University; ELENY-NICOLETA IONEL, University of Wisconsin; IGOR KUKAVICA, University of Southern California; ALEXANDER LEIBMAN, Ohio State University; XIAOBO LIU,

University of Notre Dame; MICHAEL MOLLOY, University of Toronto; ANDREI OKOUNKOV, University of California, Berkeley; PETER S. OZSVATH, Michigan State University; BJORN SANDSTEDE, Ohio State University; STEVE SHKOLLER, University of California, Davis; GIGLIOLA STAFFILANI, Stanford University; CHRISTOPH THIELE, University of California, Los Angeles; JOHN A. TOTH, McGill University; THOMAS P. WITELSKI, Duke University; and ERIC ZASLOW, Northwestern University.

—Alfred P. Sloan Foundation announcement

Elliott Receives Synge Award

GEORGE A. ELLIOTT of the University of Toronto has been chosen as the recipient of the fourth John L. Synge Award by the Royal Society of Canada for his work in the field of operator algebras, particularly on derivations, approximately finite-dimensional algebras, C^*-K-theory, noncommutative tori, and Schrödinger operators.

The John L. Synge Award was established to honor John Lighton Synge, Fellow of the Royal Society and of the Royal Society of Canada. It is given at irregular intervals for outstanding research in any branch of the mathematical sciences. The award consists of a diploma and a cash prize of $1,500. Previous recipients of the award were James Arthur (1987), Israel Michael Sigal (1993), and Joel Feldman (1996).

—From a Royal Society of Canada announcement

Rao Wins Parzen Prize

The Emanuel and Carol Parzen Prize for Statistical Innovation for 2000 has been awarded to C. RADHAKRISHNA RAO of Pennsylvania State University for "outstanding distinction and eminence in research on the theory of statistics, in applications of statistical methods in diverse fields, in providing international leadership for fifty-five years in directing statistical research centers, in continuing impact through his vision and effectiveness as a scholar and teacher, and in extensive service to American and international society."

The Parzen Prize is awarded in even-numbered years by the Department of Statistics at Texas A&M University to North American statisticians who have made outstanding and influential contributions to the development of applicable and innovative statistical methods. The 2000 Parzen Prize Committee members were Herman Chernoff, J. H. Matis, H. J. Newton, Grace Wahba, and Marvin Zelen. The prize consists of a $1,000 honorarium and travel to College Station, Texas, to present a lecture at the prize ceremony.

—Department of Statistics, Texas A&M University

Rollo Davidson Prizes Awarded

The trustees of the Rollo Davidson Trust have awarded the Rollo Davidson Prizes for 2000 to KURT JOHANSSON of the Royal Institute of Technology, Sweden, for his work on understanding the Tracy-Widom distribution in a range of contexts, including longest increasing subsequences and random matrices, and to DAVID WILSON of Microsoft Research for his work in discrete probability and computer algorithms, in particular exact simulation and coupling from the past.

The prize was established to commemorate the life and work of Rollo Davidson and is awarded to young scientists of outstanding promise and achievements for work in probability, statistics, and related areas.

—From Rollo Davidson Trust announcement

Guggenheim Fellowships Awarded

The John Simon Guggenheim Memorial Foundation has announced the names of 182 artists, scholars, and scientists who were selected as Guggenheim Fellows from more than 2,900 applicants in the 2000 competition. The awards totaled $6,345,000. Guggenheim Fellows are appointed on the basis of distinguished achievement in the past and exceptional promise for future accomplishment.

The following is a list of awardees who work in the mathematical sciences, together with their affiliations and areas of research interest.

JAMES ARTHUR, University of Toronto: Representations of classical groups; RABI BHATTACHARYA, Indiana University, Bloomington: Studies in Markov processes; JOHN STEMBRIDGE, University of Michigan: Combinatorial aspects of root systems and Weyl characters; TAMAR SCHLICK, Courant Institute of Mathematical Sciences and Howard Hughes Medical Institute, New York University: Modeling studies of protein-DNA complexes; and STEPHEN S.-T. YAU, University of Illinois, Chicago: Studies in complex and combinatorial geometry.

—From a Guggenheim Foundation news release

Fulbright Awards Announced

The J. William Fulbright Foundation and the United States Information Agency have announced the names of the recipients of the Fulbright Foreign Scholarships for 1999–2000.

Following are the U.S. scholars in the mathematical sciences who have been awarded Fulbright scholarships to lecture or conduct research, together with their home institutions and the countries in which they plan to use the awards: RICHARD M. ARON, Kent State University: Argentina;

GENADY P. CHEREPANOV, Naval Research Laboratory, Washington: Russia; LEROY A. FRANKLIN, Rose-Hulman Institute of Technology: Iceland; LEW FRIEDLAND, State University of New York, College at Geneseo: Hungary; MARIA GUADALUPE MARTINEZ, University of California, San Diego: Germany; SANFORD S. MILLER, State University of New York, College at Brockport: Romania; MOSHE ROSENFELD, Pacific Lutheran University: Czech Republic; LEONARD R. RUBIN, University of Oklahoma: Croatia; EDWARD G. SEWELL, University of Texas, El Paso: Argentina; and ANDREW J. VINCE, University of Florida: Turkey.

—From the Chronicle of Higher Education

NSF Graduate Research Fellowships Announced

The National Science Foundation (NSF) has awarded its Graduate Research Fellowships for fiscal year 2000. This program supports students pursuing doctoral study in all areas of science and engineering and provides a stipend of $15,000 per year for three years of full-time graduate study. Listed below are the names of the awardees in the mathematical sciences for 2000, followed by their undergraduate institutions (in parentheses) and the institutions where they plan to pursue graduate work.

MICHELE L. AGHASSI (Brown University), Massachusetts Institute of Technology; KAREN T. ALMGREN (Massachusetts Institute of Technology), University of California, Berkeley; HARISH S. BHAT (Harvard University), University of California, Berkeley; DAMIAN N. BURCH (California Institute of Technology), Princeton University; CONSTANTINE M. CARAMANIS (Harvard University), Massachusetts Institute of Technology; CARINA P. CURTO (Harvard University), Princeton University; SARAH E. DEAN (Duke University), Harvard University; MICHAEL L. DEVELIN (Harvard University), Massachusetts Institute of Technology; CHRISTOPHER L. DOUGLAS (Massachusetts Institute of Technology), Harvard University; EDWARD F. EARLY (Massachusetts Institute of Technology), University of Chicago; DANIEL B. FORGER (Harvard University), New York University; DARGAN M. FRIERSON (North Carolina State University, Raleigh), Princeton University; PETER E. GREEN (McGill University), Massachusetts Institute of Technology; LAWRENCE D. GUTH (Yale University), Harvard University; THOMAS A. HOFT (Saint Olaf College), University of California, Davis; KENLEY Y. JUNG (University of California, Berkeley), University of California, Berkeley; DAN A. LEE (Harvard University), Massachusetts Institute of Technology; YOON-HO LEE (Harvard University), Massachusetts Institute of Technology; MAX D. LIEBLICH (Harvard University), Princeton University; KAI JU LIU (Stanford University), New York University; JACOB A. LURIE (Harvard University), Princeton University; CHRISTOPHER D. MALON (University of Chicago), Massachusetts Institute of Technology; JOEL C. MILLER (Harvey Mudd College), Massachusetts Institute of Technology; ELISHA B. PETERSON (Harvey Mudd College), Stanford University; ALEXANDER RENWICK (Rice University), Rice

University; CHAD J. SHAMPINE (Columbia University), University of Cambridge; JOSEPH M. TERAN (University of California, Davis), Cornell University; JOEL A. TROPP (University of Texas, Austin), University of Texas, Austin; ISSAC J. TROTTS (University of California, Davis), Brown University; ARI M. TURNER (Princeton University), Stanford University; JOHN M. VOIGHT (Gonzaga University), University of California, Berkeley; BENJAMIN D. WIELAND (Massachusetts Institute of Technology), Harvard University; LAUREN K. WILLIAMS (Harvard University), Massachusetts Institute of Technology; DAVID B. WILSON (Northwestern University), University of Chicago; KEVIN M. WOODS (Wake Forest University), University of Michigan; and YU YASUFUKU (Harvard University), University of California, Berkeley.

Editor's Note: The institutions of graduate study listed here are from the students' original applications. In some cases students will have switched institutions by the time the fellowship tenure begins.

—From NSF announcement

Putnam Prizes Awarded

The winners of the 60th William Lowell Putnam Competition have been announced. The Putnam Competition is administered by the Mathematical Association of America and consists of an examination containing mathematical problems that are designed to test both originality and technical competence. Prizes are awarded to both individuals and teams.

The six highest ranking individuals, listed in alphabetical order, were SABIN CAUTIS, University of Waterloo; DEREK I. E. KISMAN, University of Waterloo; ABHINAV KUMAR, Massachusetts Institute of Technology; DAVESH MAULIK, Harvard University; CHRISTOPHER C. MIHELICH, Harvard University; and COLIN A. PERCIVAL, Simon Fraser University. WAI LING YEE of the University of Waterloo was awarded the Elizabeth Lowell Putnam Prize, which is given to the woman who turns in the most outstanding performance in the competition.

Institutions with at least three registered participants obtain a team ranking in the competition based on the rankings of three designated individual participants. The five top-ranked teams (with team members listed in alphabetical order) were: University of Waterloo (Sabin Cautis, Donny C. Cheung, Derek I. E. Kisman); Harvard University (Michael L. Develin, Ciprian Manolescu, Alexander H. Saltman); Duke University (Kevin D. Lacker, Carl A. Miller, Melanie E. Wood); University of Michigan, Ann Arbor (Chetan T. Balwe, Rishi Raj, Dapeng Zhu); and University of Chicago (Matthew T. Gealy, Christopher D. Malon, Sergey Vasseliev).

The top five individuals in the competition received cash awards of $2,500; the next ten received $1,000. The first-place team was awarded $25,000, with each team member receiving $1,000. The team awards for second place were $20,000 and $800; for third place, $15,000 and $600; for fourth place, $10,000 and $400; and for fifth place, $5,000 and $200. The Elizabeth Lowell Putnam Prize carries a cash award of $1,000.

—Elaine Kehoe

2000 Intel Science Talent Search Winners Announced

Four students working in mathematics have been awarded Intel Science Talent Search scholarships for 2000. JAYCE GETZ, an eighteen-year-old senior at Big Sky High School in Missoula, Montana, won a $75,000 scholarship for his project that shows divisibility properties of the number of ways in which a positive integer can be written as a sum, a project that extends the 1919 work of Ramanujan. ALEXANDER SCHWARTZ, a seventeen-year-old student at Radnor High School in Radnor, Pennsylvania, won a $25,000 scholarship for his work on abstract algebra, determining when a finite abelian group can be partitioned into cosets of distinct subgroups. MATTHEW REECE, an eighteen-year-old senior at duPont Manual Magnet High School in Louisville, Kentucky, also won a $25,000 scholarship for his work on providing an adaptive and possibly faster way of simulating fluid flow. ZACHARY COHN, a seventeen-year-old senior at Half Hollow Hills High School East in Dix Hills, New York, was awarded a $20,000 scholarship for his work in creating a new perspective on the study of perfect squares.

The Intel Science Talent Search, formerly known as the Westinghouse Science Talent Search, is the oldest and most respected high school science scholarship competition in the United States. Five previous winners have gone on to receive Nobel Prizes. This year the total of award scholarships and equipment was increased from $330,000 to $1.25 million. The forty finalists received awards ranging from $5,000 to $100,000.

—From an Intel Corporation announcement

Deaths

V. N. FOMIN, St. Petersburg State University, Russia, died on February 23, 2000. Born on March 6, 1937, he was a member of the Society for 10 years.

ALINE H. FRINK, retired from Pennsylvania State University, University Park, died on March 14, 2000. Born on March 2, 1904, she was a member of the Society for 70 years.

ROBERT FREED RILEY, of the State University of New York at Binghamton, died on March 4, 2000. Born on December 22, 1935, he was a member of the Society for 15 years.

ION SULICIU, of the University of Bucharest, Romania, died on November 24, 1999. Born on January 21, 1938, he was a member of the Society for 5 years.

MARVIN L. TOMBER, emeritus professor, Michigan State University, died on January 26, 2000. Born on August 4, 1925, he was a member of the Society for 52 years.

JOSEPH L. ZEMMER JR., emeritus professor, University of Missouri, Columbia, died on January 28, 2000. Born on February 23, 1922, he was a member of the Society for 53 years.