Mathematics People

Albert C. Fannjiang   Wee Teck Gan   Ravi Ramakrishna

2002–2003 AMS Centennial Fellowships Awarded

The AMS has awarded three Centennial Fellowships for 2002–03. The recipients are ALBERT C. FANNJIANG of the University of California, Davis; WEE TECK GAN of Princeton University; and RAVI KUMAR RAMAKRISHNA of Cornell University. The amount of the fellowship is $55,000, with an additional expense allowance of $1,650.

Albert C. Fannjiang

Albert Fannjiang received his Ph.D in 1992 from the Courant Institute of Mathematical Sciences, New York University, under the supervision of George Papanicolaou. He was a Computational and Applied Mathematics Assistant Professor at the University of California, Los Angeles (1992–95). In 1995, he moved to the University of California, Davis, where he is currently an associate professor and Chancellor's Fellow.

Fannjiang's research concerns differential equations and dynamical systems arising in chaotic or random environments. In particular, he has worked on the problems of turbulent transport of particles, radiative transfer of Schrödinger and acoustic waves, cracks in strain-gradient elasticity, and dynamical systems with noises. His current interests include motion in irregular velocity fields, homogenization of fluid equations, reaction-diffusion problems in fluid flows, wave propagation in multi-scaled media, and noise-induced phenomena in classical and quantum systems.

He plans to use part of the Centennial Fellowship to visit Stanford University, the Mathematical Sciences Research Institute, and the California Institute of Technology.

Wee Teck Gan

Wee Teck Gan received his Ph.D. from Harvard University in 1998 under the supervision of Benedict H. Gross, as well as Gordan Savin of the University of Utah. Since graduation, he has been at Princeton University and the Institute for Advanced Study, first as a Veblen Instructor and then as assistant professor at Princeton. He plans to use the Centennial Fellowship to visit Harvard University and Stanford University.

Gan's research interests lie in the intersection of number theory, representation theory, and the theory of automorphic forms. His current research efforts focus on the arithmetic of Fourier coefficients of automorphic forms and the construction of cusp forms and Arthur packets by theta correspondences.

Ravi Kumar Ramakrishna

Ravi Ramakrishna received his Ph.D. from Princeton University in 1992, under the direction of Andrew Wiles. He was an L. E. Dickson Instructor at the University of Chicago (1992–94) and a J. W. Gibbs Assistant Professor at Yale University (1994–98). He is currently an assistant professor at Cornell University.

Ramakrishna's main interest is algebraic number theory. The bulk of his work has involved the study of two-dimensional representations of the absolute Galois group of the rational numbers. In particular, he has studied when mod p representations can be lifted to characteristic zero deformations. The existence of such liftings provides evidence for an important conjecture of Serre. He plans to use the Centennial Fellowship to visit the University of California at Berkeley.

Please note: Information about the competition for the 2003–04 AMS Centennial Fellowships will be published in the "Mathematics Opportunities" section of an upcoming issue of the *Notices*.

—Allyn Jackson

Sunyer i Balaguer Prize Awarded

The Institut d'Estudis Catalans has awarded the 2002 Ferran Sunyer i Balaguer Prize to ALEXANDER LUBOTZKY, Hebrew University of Jerusalem, and DAN SEGAL, Oxford University, for their joint monograph *Subgroup Growth* and to ANDRÉ UNTERBERGER, University of Reims, for his monograph *Automorphic Pseudodifferential Analysis and Higher-Level Weyl Calculi*. The prize consists of 10,000 euros (about US$9,000). According to the terms of the prize, the monographs will be published in the Birkhäuser series *Progress in Mathematics*.

The Ferran Sunyer i Balaguer Prize is awarded each year for a mathematical monograph of an expository nature presenting the latest developments in an active area of mathematics research in which the author has made important contributions.

—From an Institut d'Estudis Catalans announcement

Green and Schwarz Awarded 2002 Heineman Prize

MICHAEL B. GREEN of Cambridge University and JOHN H. SCHWARZ of the California Institute of Technology have been awarded the 2002 Dannie Heineman Prize for Mathematical Physics for their work in the development of superstring theory. The prize carries a cash award of $7,500 and is presented in recognition of outstanding publications in the field of mathematical physics. The prize was established in 1959 by the Heineman Foundation for Research, Educational, Charitable, and Scientific Purposes, Inc., and is administered jointly by the American Physical Society (APS) and the American Institute of Physics (AIP). The prize is presented annually.

—From an APS announcement

Brillinger Wins Parzen Prize

The Emanuel and Carol Parzen Prize for Statistical Innovation for 2002 has been awarded to DAVID R. BRILLINGER of the University of California, Berkeley, for "outstanding distinction and eminence in research on the theory of statistical time series analysis and data analysis, in applications of statistical methods in diverse fields, and in providing international leadership and continuing impact through his vision and effectiveness as an applied statistician."

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 2002 Parzen Prize Committee members were Randall Eubank, James Matis, Bradley Efron, 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

Smirnov and Prabhakar Awarded Rollo Davidson Prizes

The trustees of the Rollo Davidson Trust have awarded the 2002 Rollo Davidson Prizes to STANISLAV SMIRNOV of the Royal Institute of Technology, Stockholm, and BALAJI PRABHAKAR of Stanford University. Smirnov was honored for his achievements in critical percolation and conformality in stochastic processes. Prabhakar was chosen for his achievements in queueing theory applied to communication networks.

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 a Rollo Davidson Trust announcement

Stewart and Falconer Win AAAS Awards

The 2002 Award for Public Understanding of Science and Technology of the American Association for the Advancement of Science (AAAS) has been awarded to IAN STEWART of the University of Warwick, England. The award acknowledges talented scientists and engineers who popularize their work and promote their research in a responsible manner. Stewart is known for his popular science writing on mathematical themes and for furthering the public understanding of science.

The AAAS Mentor Award for Lifetime Achievement was given to ETTA Z. FALCONER of Spelman College "for her passionate dedication and long-standing commitment, as a mentor, role model, administrator, and educator, to increase the number of African-American women entering mathematics-related careers."

Both awards carry a cash value of $5,000.

—From an AAAS announcement

National Science Board Gives Public Service Award

The 2002 National Science Board (NSB) Public Service Award for increasing public understanding of science and engineering has been awarded to the Society for Advancement of Chicanos and Native Americans in Science (SACNAS), an organization that promotes diversity in science careers,

especially for underrepresented Latinos and Native Americans. The annual award recognizes outstanding contributions to communicating, promoting, or helping to develop broad public policy in science and engineering. The NSB honored SACNAS for its work in mentoring and giving information, support, and guidance to young Latino and Native American scientists and engineers. SACNAS was founded in 1972 by Richard Tapia, a mathematician at Rice University.

—From a National Science Foundation announcement

Guggenheim Fellowships Awarded

The John Simon Guggenheim Memorial Foundation has announced the names of 184 artists, scholars, and scientists who were selected as Guggenheim Fellows from more than 2,800 applicants in the 2002 competition. The awards totaled $6,750,000. Guggenheim Fellows are appointed on the basis of distinguished achievement in the past and exceptional promise for future accomplishment.

Following are the names of the awardees who work in the mathematical sciences, together with their affiliations and areas of research interest. DANIEL S. FREED, University of Texas, Austin: Applications of K-theory to geometry and physics; PAUL H. HALPERN, University of the Sciences in Philadelphia: The concept of dimensionality in science; ALEXANDER KECHRIS, California Institute of Technology: Classification problems in mathematics, group actions, and equivalence relations; KEFENG LIU, University of California, Los Angeles: Mathematical and physical aspects of the mirror principle; MIKHAIL LYUBICH, State University of New York, Stony Brook: Geometric structures in holomorphic dynamics; and RICHARD TAYLOR, Harvard University: Galois representations and modular forms.

—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 2001–02. 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.

JONATHAN D. FARLEY, Vanderbilt University: United Kingdom; ABDUL J. JERRI, Clarkson University: Jordan; MARTIN L. JONES, College of Charleston: Venezuela; ANATOLY S. LIBGOBER, University of Illinois, Chicago: Israel; JAMES H. MATIS, Texas A&M University: India; ROMAN A. POLYAK, George Mason University: Israel; ALEXANDER M. SAMAROV, University of Massachusetts, Lowell: Israel; and KENNETH J. WILDER, University of Chicago: Colombia.

—From a Fulbright Foundation announcement

2002 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 2002 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 2002 Sloan Fellows in mathematics are: VINAYAK VATSAL, University of British Columbia; THOMAS SCANLON, University of California, Berkeley; ALEXANDER SOSHNIKOV, University of California, Davis; HONGKAI ZHAO, University of California, Irvine; VAN H. VU, University of California, San Diego; STEPHEN BIGELOW, University of California, Santa Barbara; LEONID V. RYZHIK, University of Chicago; DANIEL BERNSTEIN, University of Illinois, Chicago; ANDRAS VASY, Massachusetts Institute of Technology; PETER D. MILLER, University of Michigan; MARKUS KEEL, University of Minnesota; ERIC VANDEN-EIJNDEN, New York University; BURKHARD WILKING, University of Pennsylvania; BROOKE E. SHIPLEY, Purdue University; KO HONDA, University of Southern California; SERGEY LOTOTSKY, University of Southern California; RAVI DAMODAR VAKIL, Stanford University; SÁNDOR KOVÁCS, University of Washington; YU YUAN, University of Washington; and JAMES F. GEELEN, University of Waterloo.

—Alfred P. Sloan Foundation announcement

NSF Graduate Research Fellowships Announced

The National Science Foundation (NSF) has awarded its Graduate Research Fellowships for fiscal year 2002. This program supports students pursuing doctoral study in all areas of science and engineering and provides a stipend of $18,000 per year for three years of full-time graduate study.

Listed below are the names of the awardees in the mathematical sciences for 2002, followed by their undergraduate institutions (in parentheses) and the institutions at which they plan to pursue graduate work.

JAMES J. BRINK (Indiana University, Bloomington), University of California, Berkeley; ANDREW G. CANTRELL (Macalester College), University of Wisconsin, Madison; HANS P. CHRISTIANSON (University of Minnesota, Twin Cities), Stanford University; SCOTT M. CORRY (Reed College), University of California, Berkeley; ETHAN G. COTTERILL (Massachusetts Institute of Technology), Harvard University; MATTHEW B. DAY

(University of Texas, Austin), University of Chicago; SARAH E. DEAN (Duke University), Harvard University; MARVIN G. DECKER (University of Kansas), Texas A&M University; EDWARD M. FAN (University of California, Los Angeles), Massachusetts Institute of Technology; DAVID S. FREEMAN (Harvard University), University of California, Berkeley; TEENA M. GERHARDT (Stanford University), Harvard University; JOSH E. GREENE (Harvey Mudd College), University of Chicago; BERTRAND J. GUILLOU (University of Michigan), Massachusetts Institute of Technology; KAY L. KIRKPATRICK (Montana State University), University of California, Berkeley; LIONEL T. LEVINE (Harvard University), Massachusetts Institute of Technology; ROBERT LIPSHITZ (Princeton University), Stanford University; GRACE LYO (Harvard University), University of California, Berkeley; KARL E. MAHLBURG (Harvey Mudd College), University of Wisconsin, Madison; FREDERICK A. MATSEN (Stanford University), Harvard University; DAVESH MAULIK (Harvard University), University of California, Berkeley; CHRISTINA J. OBERLIN (Florida State University), Massachusetts Institute of Technology; LILLIAN B. PIERCE (Princeton University), University of California, Berkeley; DANIEL A. RAMRAS (Cornell University), Massachusetts Institute of Technology; LUCAS A. SABALKA (University of Nebraska, Lincoln), Princeton University; TRAVIS J. SCHEDLER (Harvard University), Massachusetts Institute of Technology; CAMILLIA SMITH (Michigan State University), California Institute of Technology; NOAH J. SNYDER (Harvard University), University of California, Berkeley; BRIDGET E. TENNER (Harvard University), Massachusetts Institute of Technology; ELLEN R. VEOMETT (University of Nebraska, Lincoln), University of Michigan; ERIC D. WEINHANDL (Saint Olaf College), University of Minnesota, Twin Cities; JARED S. WEINSTEIN (Harvard University), University of California, Berkeley; PAUL A. WRIGHT (University of California, Berkeley), New York University; DANIEL L. K. YAMINS (Harvard University), University of California, Berkeley; and JAKUB M. ZIELINSKI (Washington 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 an NSF announcement

2002 Intel Science Talent Search Winners Announced

Three high school students working in mathematics have been awarded Intel Science Talent Search Scholarships for 2002. JACOB LICHT, a seventeen-year-old student at West Hartford High School in West Hartford, Connecticut, won second prize and a $75,000 scholarship for his project "Rainbow Ramsey Theory: Rainbow Arithmetic Progressions and Anti-Ramsey Results". EMILY RIEHL, a seventeen-year-old student at University High School in Bloomington, Illinois, won third place and a $50,000 scholarship for her project expanding on geometric objects named for the French mathematician Jacques Tits. The project is titled

"On the Properties of Tits Graphs". Sixth place and a $25,000 scholarship was awarded to NIKITA ROZENBLYUM, seventeen years old, of Stuyvesant High School in New York, New York. His project is titled "Nullhomotopic Knots in Real Projective Space".

—From an Intel Corporation announcement

National Academy of Engineering Elections

The National Academy of Engineering has announced the election of seventy-four new members and seven foreign associates, including three who work in the mathematical sciences. FRED W. GLOVER of the University of Colorado, Boulder, was elected for contributions to optimization modeling and algorithmic development and for solving problems in distribution, planning, and design. A. STEPHEN MORSE of Yale University was elected for contributions to geometric control theory, adaptive control, and the stability of hybrid systems. ELAINE J. WEYUKER of AT&T Laboratories, Florham Park, New Jersey, was elected for contributions to software testing, reliability, and measurement, and for the development of mathematical foundations for software testing.

—From a National Academy of Engineering announcement

Correction

In the May 2002 issue of the *Notices*, an announcement about the National Academy of Sciences Prize in Applied Mathematics and Numerical Analysis gave an incorrect affiliation for the prizewinner, Heinz-Otto Kreiss. He is a professor emeritus at the University of California, Los Angeles.