
Mathematics People

SIAM Prizes Awarded

The Society for Industrial and Applied Mathematics (SIAM) awarded several prizes at its annual meeting in San Diego in July 2001.

EDUARDO D. SONTAG of Rutgers University received the W. T. and Idalia Reid Prize. This prize is given for research in or other contributions to the areas of differential equations and control theory. It carries a cash award of \$10,000.

WILLIAM W. SYMES of Rice University was awarded the Ralph Kleinman Prize, which carries a cash award of \$5,000. The Kleinman Prize is awarded to one individual for outstanding research or other contributions that bridge the gap between mathematics and applications.

THOMAS Y. HOU of the California Institute of Technology was awarded the James H. Wilkinson Prize in Numerical Analysis and Scientific Computing. This prize is awarded for research in or other contributions to numerical analysis and scientific computing during the six years preceding the award. It carries a cash award of \$1,000.

CHRISTIAN LUBICH of Universität Tübingen received the Germund Dahlquist Prize, which is awarded to a young scientist (normally under age 45) for original contributions to fields associated with Germund Dahlquist, especially the numerical solution of differential equations and numerical methods for scientific computing. A cash award of \$1,000 accompanies the prize.

In addition, two lecture prizes were awarded: DAVID L. DONOHO of Stanford University was honored with the John von Neumann Lectureship, which carries a cash award of \$2,500. STEVEN H. STROGATZ of Cornell University received the I. E. Block Community Lectureship and an honorarium of \$500.

—From a SIAM announcement

MAA Writing Awards Presented

The Mathematical Association of America (MAA) presented several awards for excellence in expository writing at its Summer Mathfest in Madison, Wisconsin, in August 2001.

The Carl B. Allendoerfer Awards are given for articles published in *Mathematics Magazine* and carry a cash award of \$500. The award for 2001 was given to JAMES N. BRAWNER, Armstrong Atlantic State University, for his article “Dinner, Dancing, and Tennis, Anyone?”, *Mathematics Magazine*, Vol. 73, 2000, and to RAPHAEL FALK JONES, Brown University, and JANICE L. PEARCE of Berea College for their joint article “A Postmodern View of Fractions and the Reciprocals of Fermat Primes”, *Mathematics Magazine*, Vol. 73, 2000.

The Trevor Evans Award is given to authors of exceptional articles that are accessible to undergraduates and that were published in *Math Horizons*. This prize carries a cash award of \$250. Two awards were given for 2001. IRA ROSENHOLTZ, Eastern Illinois University, won for his article “One Point Determines a Line—A Geometric Axiom of Choice”, *Math Horizons*, November 2000. JAMES TANTON, St. Mary’s College of Maryland, was honored for his article “A Dozen Areal Maneuvers”, *Math Horizons*, September 2000.

The Lester R. Ford Award honors articles published in *The American Mathematical Monthly* and carries a cash prize of \$500. The awardees for 2001 are KEITH KENDIG, Cleveland State University, for “Is a 2000-Year-Old Formula Still Keeping Some Secrets?”, *American Mathematical Monthly*, May 2000, and E. R. SCHEINERMAN, Johns Hopkins University, for “When Close Is Close Enough”, *American Mathematical Monthly*, June 2000.

The George Pólya Award is given for articles published in *The College Mathematics Journal* and has a cash prize of \$500. Two awards were made for 2001. EZRA A. BROWN, Virginia Polytechnic Institute and State University, won an award for “Three Fermat Trails to Elliptic Curves”, *College Mathematics Journal*, Vol. 31, 2000. CHIP ROSS, Bates College, and JODY M. SORENSEN, Grand Valley State University, were honored for their joint article “Will the Real Bifurcation Diagram Please Stand Up!”, *College Mathematics Journal*, Vol. 31, 2000.

—MAA announcement

Prizes of the CRM, Montreal

Several prizes have been awarded to mathematicians by the Centre de Recherches Mathématiques (CRM), Montreal, Canada. They are listed below.

ANDRÉ-MARIE TREMBLAY of the University of Sherbrooke was awarded the 2001 CAP-CRM Prize in Theoretical and Mathematical Physics jointly by the CRM and the Canadian Association of Physicists (CAP). The CAP-CRM Prize, instituted in 1995, is intended to recognize exceptional achievements in research in the fields of theoretical and mathematical physics. The prize is given for research done primarily in Canada or in affiliation with a Canadian university or industry. It carries a cash award of CA\$2,000 and a commemorative medal. Awardees are invited to lecture at the annual congress of the CAP.

ISRAEL M. SIGAL of the University of Toronto was awarded the 2000 CRM/Fields Institute Prize by The Fields Institute for Research in Mathematical Sciences (Toronto) and the CRM. WILLIAM T. TUTTE of the University of Waterloo has been awarded the prize for 2001. The prize recognizes exceptional achievement in the mathematical sciences. Recipients are chosen on the basis of outstanding contributions to the advancement of research, with research having been done primarily in Canada or in affiliation with a Canadian university. A prize of CA\$5,000 is awarded, and the recipients present lectures at the CRM and at The Fields Institute.

ECKHARD MEINRENKEN of the University of Toronto has been awarded the 2000 André Aisenstadt Mathematics Prize. The prize, instituted in 1991, consists of an award of CA\$3,000 and is intended to recognize talented young Canadian researchers in pure and applied mathematics who have held the Ph.D. for no more than seven years.

—From a CRM announcement

Emmanuel Candes Awarded Popov Prize

EMMANUEL CANDÉS of the California Institute of Technology was awarded the third Vasil Popov Prize at the Texas Approximation Theory Conference held in St. Louis, Missouri. The Popov Prize is awarded every third year to a young

mathematician (within six years of receipt of the Ph.D.) who has made outstanding research contributions to approximation theory and related areas. This year the prize consisted of a cash award of \$1,000.

Candés received his Ph.D. in statistics from Stanford University in 1998. He was awarded the Popov Prize for his development of ridgelets and other wavelet descendents, such as curvelets. These novel building blocks provide more efficient representations of functions that have singularities along curves. They are motivated by potential applications to image and data processing. In addition to developing ridgelet frames, Candés solved deep problems in nonlinear approximation by linear combinations of ridgelets. Previous Popov Prize winners are Albert Cohen (1995) and Arno Kuijlaars (1998).

—Ronald DeVore, University of South Carolina

O'Rourke Named NSF Distinguished Teaching Scholar

JOSEPH O'ROURKE of Smith College was chosen as one of the winners of the first Director's Awards for Distinguished Teaching Scholars, established by the National Science Foundation (NSF). Intended to encourage scientists and engineers to become involved in education, this award is the NSF's highest honor for excellence in both teaching and research. O'Rourke is one of seven scholars who will each receive an award of \$300,000 over four years. They will be honored at a ceremony at the National Academy of Sciences in Washington, DC.

—From an NSF announcement

Radcliffe Institute for Advanced Study Fellowships Awarded

The Radcliffe Institute for Advanced Study at Harvard University awards more than 50 funded postdoctoral fellowships each year to scholars, professionals, writers, and artists from throughout the world. Three mathematicians are among the fellows chosen for the 2001–2002 academic year.

MEGAN M. KERR of Wellesley College will conduct research on the geometry of symmetric spaces, solvable groups, and harmonic manifolds. She proposes to describe the family of Einstein solvmanifolds “near” a certain hyperbolic space which lies within a twelve-dimensional family. TATIANA TORO of the University of Washington will study the two-sided free boundary regularity problem with rough boundary data. She intends to establish that weak notions of regularity are for many purposes sufficient to answer basic questions in analysis and geometry. NANNY WERMUTH

of the Johannes Gutenberg University, Mainz, will study joint responses in graphical Markov models. She intends to design simple algorithms to derive important implications of a given process, no matter which type of variables and which type of distributions of variables are involved.

—From a Radcliffe Institute announcement

National Defense Science and Engineering Graduate Fellowships Awarded

Seventeen young mathematicians have been awarded National Defense Science and Engineering Graduate (NDSEG) Fellowships by the Department of Defense (DoD). As a means of increasing the number of U.S. citizens trained in disciplines of military importance in science and engineering, DoD awards fellowships to individuals who have demonstrated ability and special aptitude for advanced training in science and engineering. The fellowships are sponsored by the United States Army, Navy, and Air Force.

Following are the names of the fellows in mathematics, followed by the student's institution and the office that awarded the fellowship. JY-YING CHEN, Stanford University, Office of Naval Research (ONR); LI-CHUNG CHEN, Harvard University, ONR; NICHOLAS ERIKSSON, Massachusetts Institute of Technology, Army Research Office (ARO); JOSEPH FLENNER, University of Michigan, ARO; JAIME HALETKY, Rensselaer Polytechnic Institute, Air Force Office of Scientific Research (AFOSR); WILLIAM HEUETT, University of Washington, AFOSR; GEORGE KIRKUP, Harvard University, AFOSR; FUMEI LAM, Massachusetts Institute of Technology, ONR; MARCO LATINI, Harvey Mudd College, AFOSR; JERREL MAST, Harvard University, ARO; CAROL MEYERS, Pomona College, ARO; CARL MILLER, Duke University, ONR; MICHAEL SCHEIN, California Institute of Technology, ONR; RAPHAEL SCHORR, Massachusetts Institute of Technology, AFOSR; WILLIAM SHERWOOD, Princeton University, AFOSR; JOHN THACKER, Duke University, ARO; and MARK TYGERT, Princeton University, ARO.

—From an NDSEG announcement

Invited Speakers for ICM2002

The International Congress of Mathematicians 2002 (ICM2002) will be held in Beijing, China, August 20–28, 2002. Below are the names of individuals invited to present lectures at the congress. For further information, consult the ICM2002 website, <http://www.icm2002.org.cn>. The full program of ICM2002 will be published in a future issue of the *Notices*.

Plenary Speakers

NOGA ALON, Tel Aviv University, Israel; DOUGLAS NORMAN ARNOLD, Institute for Mathematics and its Applications, University of Minnesota, USA; ALBERTO BRESSAN, S.I.S.S.A., Italy;

LUIS ANGEL CAFFARELLI, University of Texas at Austin, USA; SUN-YUNG ALICE CHANG, Princeton University, USA; DAVID LEIGH DONOHO, Stanford University, USA; LUDWIG DMITRIEVICH FADDEEV, Steklov Mathematical Institute, Russia; SHAFI GOLDWASSER, Massachusetts Institute of Technology, USA; UFFE HAAGERUP, University of Southern Denmark; MICHAEL JEROME HOPKINS, Massachusetts Institute of Technology, USA; VICTOR KAC, Massachusetts Institute of Technology, USA; HARRY KESTEN, Cornell University, USA; FRANCES CLARE KIRWAN, University of Oxford, United Kingdom; LAURENT LAFFORGUE, Institut des Hautes Études Scientifiques, France; DAVID B. MUMFORD, Brown University, USA; HIRAKU NAKAJIMA, Kyoto University, Japan; YUM-TONG SIU, Harvard University, USA; RICHARD LAWRENCE TAYLOR, Harvard University, USA; GANG TIAN, Massachusetts Institute of Technology, USA; EDWARD WITTEN, Institute for Advanced Study, USA.

45-Minute Invited Speakers

Section 1: Logic. ELISABETH BOUSCAREN, Université de Paris 7-CNRS, France; JAN DENEFF, Catholic University of Leuven, Belgium; MOTI GITIK, Tel Aviv University, Israel; DANIEL LASCAR, Université de Paris 7, France; HUGH WOODIN, University of California at Berkeley, USA.

Section 2: Algebra. ALEXEI IGOREVICH BONDAL, Steklov Institute of Mathematics, Russia; OFER GABBER, Institut des Hautes Études Scientifiques, France; MARC NOEL LEVINE, Northeastern University, USA; DMITRI OLEGOVICH ORLOV, Steklov Institute of Mathematics, Russia; CHERYL ELISABETH PRAEGER, University of Western Australia; MARKUS ROST, The Ohio State University, USA; ZLIL SELA, Hebrew University, Israel; J. TOBY STAFFORD, University of Michigan, USA; DMITRY E. TAMARKIN, Harvard University, USA.

Section 3: Number Theory. JAMES W. COGDELL, Oklahoma State University, USA; HENRI JOSE COHEN, Université de Bordeaux I, France; ROBERT FREDERICK COLEMAN, University of California at Berkeley, USA; JEAN-MARC FONTAINE, Université de Paris-Sud, France; ANNETTE HUBER, Universität Leipzig, Germany; KAZUYA KATO, University of Tokyo, Japan; STEPHEN S. KUDLA, University of Maryland, USA; ILYA I. PIATETSKI-SHAPIRO, Yale University, USA; EMMANUEL B. ULLMO, Princeton University, USA, and Université Paris-Sud, France; TREVOR DION WOOLEY, University of Michigan, USA.

Section 4: Differential Geometry. BENJAMIN HARDWICK ANDREWS, Australian National University; ROBERT BARTNIK, University of Canberra, Australia; PAUL IAN BIRAN, Tel-Aviv University, Israel; HUBERT LEWIS BRAY, Massachusetts Institute of Technology, USA; XIUXIONG CHEN, Princeton University, USA; WEIYUE DING, Chinese Academy of Sciences and Peking University, China; PETER WAI-KWONG LI, University of California at Irvine, USA; YIMING LONG, Nankai University, China; ANTON PETRUNIN, Pennsylvania State University, USA; XIAOCHUN RONG, Rutgers University at New Brunswick, USA; RICHARD EVAN SCHWARTZ, University of Maryland, USA; PAUL SEIDEL, École Polytechnique, France, and Institute for Advanced Study, USA; BRIAN CABELL WHITE, Stanford University, USA; WEIPING ZHANG, Nankai Institute of Mathematics, Nankai University, China.

Section 5: Topology. MLADEN BESTVINA, University of Utah, USA; YURI VITALIEVICH CHEKANOV, Moscow Center for Continuous Mathematics Education, Russia; MIKIO FURUTA, University of Tokyo, Japan; EMMANUEL GIROUX, École Normale Supérieure de Lyon, France; LARS HESSELHOLT, Massachusetts Institute of Technology, USA; ELENY-NICOLETA IONEL, University of Wisconsin at Madison, USA; PETER TEICHNER, University of California at San Diego, USA; ULRIKE LUISE TILLMANN, Oxford University, United Kingdom; SHICHENG WANG, Peking University, China.

Section 6: Algebraic and Complex Geometry. HÉLÈNE ESNAULT, Universität Essen, Germany; LOTHAR GOETTSCHÉ, Abdus Salam International Centre for Theoretical Physics, Italy; SHIGERU MUKAI, Research Institute for Mathematical Sciences, Kyoto University, Japan; RAHUL VIJAY PANDHARIPANDE, California Institute of Technology, USA; RICHARD PINK, Eidgenössische Technische Hochschule, Zürich, Switzerland; MILES REID, University of Warwick, United Kingdom; VADIM SCHECHTMAN, Université Paul Sabatier, France; BURT TOTARO, University of Cambridge, United Kingdom.

Section 7: Lie Groups and Representation Theory. PATRICK DELORME, Institut de Mathématiques de Luminy, France; PAVEL I. ETINGOF, Massachusetts Institute of Technology, USA; DENNIS GAITSGORY, Harvard University, USA; MICHAEL H. HARRIS, Université de Paris 7, France; ALEXANDER KLYACHKO, Bilkent University, Turkey; TOSHIYUKI KOBAYASHI, Research Institute for Mathematical Sciences, Kyoto University, Japan; VIKRAM BHAGVANDAS MEHTA, Tata Institute of Fundamental Research, India; ECKHARD MEINRENKEN, University of Toronto, Canada; MAXIM LEONIDOVICH NAZAROV, University of York, United Kingdom; FREYDOON SHAHIDI, Purdue University, USA; MARIE-FRANCE VIGNERAS, Université de Paris 7, France.

Section 8: Real and Complex Analysis. ALEXANDRE EREMENKO, Purdue University, USA; JUHA MATTI HEINONEN, University of Michigan, USA; CARLOS E. KENIG, University of Chicago, USA; NICOLAS LERNER, Université de Rennes 1, France; MICHAEL LIAM MCQUILLAN, Institut des Hautes Études Scientifiques, France; TERENCE CHI-SHEN TAO, University of California at Los Angeles, USA; CHRISTOPH THEILE, University of California at Los Angeles, USA; STEVEN ZELDITCH, Johns Hopkins University, USA; XIANGYU ZHOU, Chinese Academy of Sciences, China.

Section 9: Operator Algebras and Functional Analysis. SEMYON ALESKER, Tel Aviv University, Israel; PHILIPPE BIANE, École Normale Supérieure, France; DIETMAR HERBERT BISCH, University of California at Santa Barbara, USA; LIMING GE, Chinese Academy of Sciences, China; VINCENT G. LAFFORGUE, Université de Paris Pierre et Marie Curie, France; RAFAL LATALA, Warsaw University, Poland.

Section 10: Probability and Statistics. GÉRARD ALBERT BEN AROUS, École Polytechnique Fédérale de Lausanne, Switzerland; JEAN BERTOIN, Université de Paris 6, France; PETER J. BICKEL, University of California at Berkeley, USA; ERWIN BOLTHAUSEN, Universität Zürich, Switzerland; LAWRENCE D. BROWN, University of Pennsylvania, USA; MUFA CHEN, Beijing Normal University, China; KURT JOHANSSON, Royal Institute of Technology, Sweden; GREGORY FRANCIS LAWLER, Duke University, USA; YUVAL PERES, University of California at Berkeley, USA; AGOSTON PISZTORA, Carnegie Mellon University,

USA; TERENCE PAUL SPEED, University of California at Berkeley, USA; ANDREI YURIEVICH ZAITSEV, St. Petersburg Branch of the Steklov Mathematical Institute, Russia; OFER ZEITOUNI, Technion, Israel.

Section 11: Partial Differential Equations. LUIGI AMBROSIO, Scuola Normale Superiore, Italy; HAJER BAHOURI, Faculté des Sciences de Tunis, Campus Universitaire, Tunisia; JI-AXING HONG, Fudan University, China; TERO KILPILÄINEN, University of Jyväskylä, Finland; YANYAN LI, Rutgers University, USA; TAI-PING LIU, Academia Sinica, Taiwan, and Stanford University, USA; VLADIMIR MAZ'YA, Linköping University, Sweden; TRISTAN JOEL RIVIÈRE, École Normale Supérieure and École Polytechnique, France; DANIEL IOAN TATARU, Northwestern University, USA; XU-JIA WANG, Australian National University; SIJUE WU, University of Maryland, USA; MACIEJ ZWORSKI, University of California at Berkeley, USA.

Section 12: Ordinary Differential Equations and Dynamical Systems. ALAIN CHENCINER, IMCCE and Université de Paris VII, France; MICHAEL BENEDICKS, Royal Institute of Technology, Sweden; CHRISTIAN BONATTI, Université de Bourgogne, France; EDUARD FEIREISL, Czech Academy of Sciences, Czech Republic; BERNOLD FIEDLER, Freie Universität Berlin, Germany; GIOVANNI FORNI, Princeton University, USA; ENRIQUE RAMIRO PUJALS, Universidade Federal de Rio de Janeiro, Brazil; DANIEL J. RUDOLPH, University of Maryland, USA; LEONID PAVLOVICH SHILNIKOV, Institute of Applied Mathematics and Cybernetics, Russia; JOHN SMILLIE, Cornell University, USA; DMITRY TRESCHÉV, Moscow State University, Russia.

Section 13: Mathematical Physics. JEAN BRICMONT, University of Louvain, Belgium; MICHAEL RONALD DOUGLAS, Rutgers University, USA; JEAN-PIERRE ECKMANN, University of Geneva, Switzerland; DANIEL S. FREED, University of Texas at Austin, USA; KENTARO HORI, Harvard University, USA; SVETLANA JITOMIRSKAYA, University of California at Irvine, USA; KEFENG LIU, University of California at Los Angeles, USA; BRUNO NACHTERGAELE, University of California at Davis, USA; NIKITA ALEKSANDROVICH NEKRASOV, Institut de Hautes Études Scientifiques, France; MASATOSHI NOUMI, Kobe University, Japan; CRAIG ARNOLD TRACY, University of California at Davis, USA; MACIEJ P. WOJTKOWSKI, University of Arizona, USA.

Section 14: Combinatorics. IMRE BARANY, Hungarian Academy of Sciences and University College London, United Kingdom; AART BLOKHUIS, Technical University Eindhoven, The Netherlands; GÉRARD CORNUÉJOLS, Carnegie Mellon University, USA; PHILIPPE FLAJOLET, INRIA Rocquencourt, France; NATHAN LINIAL, Hebrew University, Israel; BRUCE ALAN REED, Université de Paris Pierre et Marie Curie, France, and McGill University, Canada; PETER WINKLER, Bell Laboratories, USA; GÜNTER M. ZIEGLER, Technische Universität Berlin, Germany.

Section 15: Mathematical Aspects of Computer Science. SANJEEV ARORA, Princeton University, USA; URIEL FEIGE, The Weizmann Institute, Israel; RUSSELL GRAHAM IMPAGLIAZZO, University of California of at San Diego, USA; RAVI KANNAN, Yale University, USA; ALEXEI Y. KITAEV, Microsoft Research, USA; RAN RAZ, The Weizmann Institute, Israel; DANIEL ALAN SPIELMAN, Massachusetts Institute of Technology, USA.

Section 16: Numerical Analysis and Scientific Computing. ALBERT A. COHEN, Université de Paris Pierre et Marie Curie, France; JAMES WELDON DEMMEL, University of California at Berkeley, USA; MITCHELL BARRY LUSKIN, University

of Minnesota, USA; ROLF C. RANNACHER, Universität Heidelberg, Germany; CHRISTOPH SCHWAB, Eidgenössische Technische Hochschule, Switzerland; JAMES A. SETHIAN, University of California at Berkeley, USA; EITAN TADMOR, University of California at Los Angeles, USA.

Section 17: Application of Mathematics in the Sciences.

YANN BRENIER, Université de Nice, France; MICHAEL P. BRENNER, Harvard University, USA; WEINAN E, Princeton University, USA, and Peking University, China; NICOLE EL KAROUI, École Polytechnique, France; LEI GUO, Chinese Academy of Sciences, China; THOMAS C. HALES, University of Michigan, USA; NANCY JANE KOPELL, Boston University, USA; ALEXANDER MIELKE, Universität Stuttgart, Germany; FELIX OTTO, Universität Bonn, Germany; ALFIO MARIA QUARTERONI, École Polytechnique Fédérale de Lausanne, Switzerland, and Politecnico di Milano, Italy; ZHOUPING XIN, The Chinese University of Hong Kong; JIA-AN YAN, Chinese Academy of Sciences, China.

Section 18: Mathematics Education and Popularization of Mathematics. (*Note:* Section 18 has three 45-minute speakers, plus an additional eight speakers who will participate in two panel discussions running 90 minutes each.)

45-minute speakers: JEAN-LUC DORIER, Laboratoire Leibniz, France; VAGN LUNDGAARD HANSEN, Technical University of Denmark; SHUTIE XIAO, Tsinghua University, China. Panel, Group 1: JAN DE LANGE, University of Utrecht, The Netherlands; GABRIELE KAISER (moderator), Universität Hamburg, Germany; FREDERICK KOON-SHING LEUNG, University of Hong Kong; IVAN YASCHENKO, Moscow Center for Continuous Math Education, Russia. Panel, Group 2: DEBORAH LOEWENBERG BALL, University of Michigan, USA; CELIA MARY HOYLES, University of London, United Kingdom; HANS NIELS JAHNKE (moderator), Universität Essen, Germany; NITSA MOVSHOVITZ-HADAR, Technion-Israel Institute of Technology.

Section 19: History of Mathematics. UMBERTO BOTTAZZINI, Università di Palermo, Italy; MORITZ EPPLE, Universität Bonn, Germany; ANJING QU, Northwest University, China.

—From an ICM announcement