
Mathematics People

MAA Writing Awards Presented

The Mathematical Association of America (MAA) presented several awards for excellence in expository writing at its Summer Mathfest in Los Angeles in August 2000.

The Carl B. Allendoerfer Award is given for articles published in *Mathematics Magazine* and carries a cash award of \$500. The award for 2000 was given to DONALD TEETS and KAREN WHITEHEAD, both of the South Dakota School of Mines and Technology, for their article "The Discovery of Ceres: How Gauss Became Famous", *Mathematics Magazine*, April 1999.

The Trevor Evans Award of \$250 is given to authors of exceptional articles that are accessible to undergraduates and that were published in *Math Horizons*. Two awards were given for 2000. STAN WAGON of Macalester College, St. Paul, Minnesota, won for his article "The Ultimate Flat Tire", *Math Horizons*, February 1999, and PETER SCHUMER of Middlebury College was honored for his article "The Magician of Budapest", *Math Horizons*, April 1999.

The Lester R. Ford Award honors articles published in *The American Mathematical Monthly* and carries a cash prize of \$500. Three awards were made for 2000 to the following mathematicians: P. J. McKENNA of the University of Connecticut for the article "Large Torsional Oscillations in Suspension Bridges Revisited: Fixing an Old Approximation", *American Mathematical Monthly*, January 1999; WILLIAM J. TERRELL of Virginia Commonwealth University for the two-part article "Some Fundamental Control Theory I: Controllability, Observability, and Duality", *American Mathematical Monthly*, October 1999, and "Some Fundamental Control Theory II: Feedback Linearization of Single Input Nonlinear Systems", *American Mathematical Monthly*, November 1999; and VILMOS TOTIK of Bolyai Institute, Hungary, for "A Tale of Integrals", *American Mathematical Monthly*, March 1999.

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 1999. EZRA BROWN of Virginia Polytechnic Institute and State University was honored for his article "Square Roots from 1; 24,51,10 to Dan Shanks", *College Mathematics Journal*, March 1999; and MARTIN GARDNER received the award for the article

"The Asymmetric Propeller", *College Mathematics Journal*, January 1999.

—Mathematical Association of America announcement

SIAM Prizes Awarded

The Society for Industrial and Applied Mathematics (SIAM) awarded several prizes at its annual meeting in July 2000.

The George Pólya Prize, given every two years, was awarded to NOGA ALON of Tel-Aviv University. The prize is awarded alternately for a notable application of combinatorial theory or for a contribution in the areas of approximation theory, complex analysis, number theory, orthogonal polynomials, probability theory, or mathematical discovery and learning. The prize carries a cash award of \$20,000.

The Richard C. DiPrima Prize, given in even-numbered years, was awarded to KEITH LINDSAY of the University of Michigan, Ann Arbor. The DiPrima Prize, which commemorates a former president of SIAM, is awarded to a young scientist for outstanding research in applied mathematics. The prize carries a cash award of \$1,000.

The W. T. and Idalia Reid Prize has been awarded to CONSTANTINE M. DAFERMOS of Brown University. This prize is given for research in or other contributions to the areas of differential equations and control theory.

MARGARET H. WRIGHT of Bell Laboratories, Lucent Technologies, was awarded the SIAM Prize for Distinguished Service to the Profession. This prize is given to an applied mathematician who has made distinguished contributions to furthering applied mathematics on the national level.

—From a SIAM announcement

London Mathematical Society Prizes Awarded

The London Mathematical Society (LMS) has announced the awarding of several prizes for 2000.

The Pólya Prize, given in recognition of outstanding creativity in, imaginative exposition of, or distinguished

contribution to mathematics within the United Kingdom, has been awarded to TERENCE J. LYONS of Oxford University for his fundamental contributions to analysis and probability, ranging from those of a purely geometric character to applications in financial mathematics.

The Senior Berwick Prize is awarded in recognition of an outstanding piece of mathematical research that was published by the LMS during the eight years ending December 31, 1999. The Senior Berwick Prize has been awarded to JOHN F. TOLAND of the University of Bath for his paper, coauthored with E. N. Dancer, "The index change and global bifurcation for flows with a first integral", published in the *Proceedings of the London Mathematical Society*.

The Naylor Prize and Lectureship in Applied Mathematics is awarded for work in, influence on, and contributions to applied mathematics and/or the applications of mathematics and for outstanding lecturing abilities. The Naylor Prize for 2000 is awarded to ATHANASSIOS S. FOKAS of Imperial College, London, for his substantial contributions to the theory of integrable systems and to the theory of other important linear and nonlinear equations, including boundary-value problems.

The Whitehead Prizes are awarded to mathematicians who are under the age of forty years, who were mainly educated in the United Kingdom, and who are not already Fellows of the Royal Society. They are intended to cover all fields of mathematics, including applied mathematics, mathematical physics, and mathematical aspects of computer science. Four Whitehead Prizes have been awarded for 2000: to MARK A. J. CHAPLAIN (Dundee University); GWYNETH M. STALLARD (The Open University); ANDREW M. STUART (University of Warwick); and BURT J. TOTARO (Cambridge University).

—From an LMS announcement

Johnson and Padberg Win von Neumann Prize

The 2000 John von Neumann Theory Prize, the highest prize given in the field of operations research and management science, has been awarded jointly to ELLIS L. JOHNSON of the Georgia Institute of Technology and MANFRED W. PADBERG of New York University.

The \$5,000 prize, presented by the Institute for Operations Research and the Management Sciences (INFORMS), was awarded to Johnson and Padberg for "fundamental contributions to integer programming and combinatorial optimization." Their work combines theory with algorithm development, computational testing, and the solution of real-world problems. In their joint work with Crowder and in subsequent work with others, they showed how to formulate and efficiently solve very large-scale practical 0-1 programs with important applications in industry and transportation.

—From an INFORMS announcement

B. H. Neumann Awards Given

The B. H. Neumann Awards for 2000 have been awarded by the Board of the Australian Mathematics Trust to MALCOLM BROOKS of the University of Canberra and MAURICE STARCK, Joint National Director for New Caledonia, Australian Mathematics Competition.

The awards, named for Bernhard H. Neumann, are presented each year to mathematicians who have made important contributions over many years to the enrichment of mathematics learning in Australia and its region.

—Board of the Australian Mathematics Trust

Third World Academy of Sciences Awards Presented

The Third World Academy of Sciences (TWAS) has presented its 1999 Award in Mathematics to SERVET MARTINEZ of Universidad de Chile for "significant contributions in probability theory, in particular conditionally invariant distributions in Markov processes and dynamical systems, and for the study of deep connections between ultrametricity and potential theory."

The TWAS annually awards five prizes of \$10,000 each to scientists from developing countries who have made outstanding contributions to the advancement of basic sciences: biology, chemistry, mathematics, physics, and basic medical sciences. The prizes will be presented at the meeting of the TWAS in Tehran in October 2000.

—From a TWAS 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.

DAVID J. ROWE of the University of Toronto was awarded the 1999 CAP-CRM Prize in Theoretical and Mathematical Physics jointly by the CRM and the Canadian Association of Physicists (CAP). The prize for the year 2000 has been awarded to GORDON W. SEMENOFF of the University of British Columbia. 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.

STEPHEN A. COOK of the University of Toronto has been awarded the 1999 CRM/Fields Institute Prize by the Fields Institute for Research in Mathematical Sciences (Toronto) and the CRM. 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.

CHANGFENG GUI of the University of British Columbia has been awarded the 1999 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

Dirac Medal Winners Announced

The International Center for Theoretical Physics (ICTP) in Trieste, Italy, has awarded the 2000 Dirac Medal to HELEN QUINN (Stanford University), HOWARD GEORGI (Harvard University), and JOGESH PATI (University of Maryland). Quinn is the first woman to be awarded the Dirac Medal in the 15-year history of the award.

According to the award citation, the three scientists are being honored for their “pioneering contributions to the quest for a unified theory of quarks and leptons and the strong, weak, and electromagnetic interactions.” This research follows the same lines that won the Nobel Prize in 1979 for Abdus Salam, the founder of the ICTP.

The Paul Adrien Maurice Dirac medal was instituted in 1985 to recognize outstanding contributions to theoretical physics and mathematics. The award is announced yearly on August 8, P. A. M. Dirac’s birthday. The prize carries a cash award of \$5,000.

An international committee of distinguished scientists selects the winners from among nominated candidates. The committee invites nominations from anyone working in the areas of theoretical physics or mathematics. The Dirac Medal is not awarded to Nobel Prize or Wolf Foundation Prize winners.

—From an ICTP announcement

Erdős Awards Presented

The Paul Erdős National Awards of the World Federation of National Mathematics Competitions (WFNMC) for 2000 have been presented to FRANCISCO BELLOT ROSADO of the Institute Emilio Ferrari, Valladolid, Spain; ISTVAN REIMAN of Hungary; and JANOS SURANYI, also of Hungary.

The Erdős Award was established to recognize contributions by mathematicians who have played a significant role in developing mathematical challenges at the national level and who have been a stimulus for enriching mathematics learning.

The World Federation of National Mathematics Competitions is an organization of national mathematics competitions affiliated as a special interest group of the

International Commission for Mathematical Instruction (ICMI). Its purpose is to provide a focal point for those interested in and concerned with conducting national mathematics competitions to stimulate mathematics learning.

—From a WFNMC announcement

American Academy of Arts and Sciences Elections

Seven mathematicians have been elected to membership in the American Academy of Arts and Sciences in 2000. They are: RICHARD E. BORCHERDS (University of California, Berkeley), MICHAEL G. CRANDALL (University of California, Santa Barbara), DAVID W. McLAUGHLIN (New York University), GEORGE PAPANICOLAOU (Stanford University), ANATOLI V. SKOROKHOD (Michigan State University), W. HUGH WOODIN (University of California, Berkeley), and ANDREW CHI-CHIH YAO (Princeton University). BENJAMIN WEISS (Hebrew University of Jerusalem) was elected a foreign honorary member.

The American Academy of Arts and Sciences was founded in 1780 to foster the development of knowledge as a means of promoting the public interest and social progress. The membership of the academy is elected and represents distinction and achievement in a range of intellectual disciplines—mathematical and physical sciences, biological sciences, social arts and sciences, and humanities and fine arts.

—From an American Academy announcement

Royal Society of Canada Elections

Two mathematicians have been elected as Fellows of the Royal Society of Canada in 2000. They are NIGEL HIGSON of Pennsylvania State University and GORDON SLADE of the University of British Columbia. ANDREW J. WILES of Princeton University has been elected as a Foreign Fellow.

The Royal Society of Canada encompasses a broad range of disciplines and is dedicated to promoting and developing learning and research in the arts and sciences.

—From a Royal Society of Canada announcement

Royal Society of London Elections

In May 2000 the Royal Society of London elected a number of new fellows. Those in the mathematical sciences are: PETER G. HALL, professor of statistics, Centre for Mathematics and its Applications, Australian National University; ROBERT S. MACKAY, director of Mathematical Interdisciplinary Research, Mathematics Institute, University of Warwick; and MADABUSI S. RAGHUNATHAN,

distinguished professor, Tata Institute of Fundamental Research. Elected as a Foreign Member was GRIGORY I. BARENBLATT, professor in residence at the University of California, Berkeley.

—From a London Mathematical Society announcement

Académie des Sciences Elections

The Académie des Sciences de Paris has announced the election of four mathematical scientists as foreign associates. They are: JOHN BALL (University of Oxford), JEAN BOURGAIN (Institute for Advanced Study), JIM MURRAY (University of Washington, Seattle), and EDWARD WITTEN (Institute for Advanced Study).

—From an Académie des Sciences announcement

China Finishes First in International Mathematical Olympiad

The team from China took first-place honors at the 41st International Mathematical Olympiad (IMO), held in Taejeon, South Korea, July 19 and 20, 2000. China scored 218 of a possible 252 points. Russia finished second with 215 points, and the United States took third place with 184 points. Teams representing 82 countries competed in the Olympiad. The remainder of the top twelve teams and their point totals were South Korea (172), Bulgaria (169), Vietnam (169), Belarus (165), Taiwan (164), Hungary (156), Iran (155), Israel (139), and Romania (139).

The U. S. team, consisting of six American high school students, won six medals—three gold and three silver—at the competition. The winning team members were: REID BARTON (home schooled, Arlington, Massachusetts), gold medalist; GEORGE LEE JR. (Aragon High School, San Mateo, California), gold medalist; OAZ NIR (Monta Vista High School, Saratoga, California), gold medalist; RICKY LIU (Newton South High School, Newton, Massachusetts), silver medalist; PO-RU LOH (James Madison Memorial High School, Madison, Wisconsin), silver medalist; and PAUL VALIANT (Milton Academy, Belmont, Massachusetts), silver medalist. Barton and Valiant were also medalists in last year's competition.

The team was chosen on the basis of the students' performance in the 29th USA Mathematical Olympiad. The students attended a four-week Mathematical Olympiad Summer Program at the University of Nebraska, Lincoln, over the past summer under the leadership of Titu Andreescu (Illinois Mathematics and Science Academy), director of the American Mathematics Competitions. The USA Mathematical Olympiad is a program of the Mathematical Association of America. Financial and program support for the competition is also provided by the Army Research Office, the Office of Naval Research, the

Microsoft Corporation, and the University of Nebraska, Lincoln.

—From American Mathematics Competitions news release

Deaths

JEANNE L. AGNEW, retired from Oklahoma State University, Stillwater, died on May 8, 2000. She was born on May 3, 1917.

HUGH GORDON, professor emeritus, State University of New York at Albany, died on December 26, 1998. Born on November 23, 1930, he was a member of the Society for 46 years.

FEDERICO GRABIEL, of Red Bluff, CA, died on May 12, 2000. Born on October 12, 1918, he was a member of the Society for 42 years.

YVONNE G. GREENLEAF, Rivier College, Nashua, NH, died on August 3, 2000. Born on November 25, 1943, she was a member of the Society for 6 years.

S. T. HU, professor emeritus, University of California at Los Angeles, died on May 6, 1999. Born on October 9, 1914, he was a member of the Society for 50 years.

FRANK M. LENTI, of Worcester, MA, died on March 14, 2000. Born on August 14, 1921, he was a member of the Society for 6 years.

GREGORY A. MCRILL, Everyday Learning Corp., Streamwood, IL, died on April 27, 2000. Born on April 2, 1961, he was a member of the Society for 16 years.

CHARLES W. MORAN, professor emeritus, Northeastern Illinois University, died on December 17, 1999. Born on June 15, 1907, he was a member of the Society for 62 years.

FRANCIS J. MURRAY, professor emeritus, Duke University, Durham, NC, died on March 15, 1996. Born on February 3, 1911, he was a member of the Society for 62 years.

CYRIL A. OFFORD, professor emeritus, University of London, died on June 4, 2000. Born on June 9, 1906, he was a member of the Society for 37 years.

EMIN T. ONAT, of Yale University, died on July 4, 2000. Born on January 28, 1925, he was a member of the Society for 48 years.

HERBERT C. PARRISH, retired from the University of North Texas, Denton, died on June 28, 2000. Born on October 8, 1919, he was a member of the Society for 56 years.

FRANKLIN P. PETERSON, of the Massachusetts Institute of Technology, died on September 1, 2000. Born on August 27, 1930, he was a member of the Society for 47 years. He was treasurer of the AMS for the years 1974-1998.

JAMES P. SPENCER, of College Station, TX, died on February 24, 2000. Born on August 28, 1932, he was a member of the Society for 39 years.

ARTHUR H. STONE, professor emeritus, Northeastern University, died on August 6, 2000. Born on September 30, 1916, he was a member of the Society for 58 years.

JEFFREY D. WESTON, professor emeritus, University of Wales, died on March 3, 2000. Born on September 15, 1919, he was a member of the Society for 50 years.