Mathematics People

SIAM Awards Pólya Prize

The George Pólya Prize for 1998 was awarded by the Society for Industrial and Applied Mathematics at its annual meeting in July to PERCY DEIFT of New York University-Courant Institute, XIN ZHOU of Duke University, and PETER SARNAK of Princeton University.

The Pólya Prize is awarded every two years for notable contributions in an area of mathematics that was of interest to George Pólya. The prize is awarded alternately for a notable application of combinatorial theory or for a contribution in any of the following areas: approximation theory, complex analysis, number theory, orthogonal polynomials, probability theory, or mathematical discovery and learning. The prize is intended to recognize specific recent work. The prize carries a total cash award of $20,000, which is divided equally among the recipients.

—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 Toronto in July 1998.

The Carl B. Allendoerfer Awards are given for articles published in *Mathematics Magazine*; they carry a cash award of $500. The 1998 award went to DAN KALMAN of American University, ROBERT MENA of California State University, Long Beach, and SHAHRIAR SHAHRIARI of Pomona College for their joint article "Variations on an irrational theme—geometry, dynamics, algebra", *Mathematics Magazine*, April 1997.

The Trevor Evans Award is given to authors of exceptional articles that are accessible to undergraduates and that were published in *Math Horizons*. The prize carries a cash award of $250. Two awards were given this year: to TOM M. APOSTOL of the California Institute of Technology for his article "What is the most surprising result in mathematics? (Part II)", *Math Horizons*, February 1997; and to MARTIN GARDNER of Hendersonville, North Carolina, for his article "The square root of two = 1.41421 35623 73095…", *Math Horizons*, April 1997.

The George Pólya Award is given for articles published in *The College Mathematics Journal* and has a cash prize of $500. This year three recipients were chosen. KEVIN G. KIRBY of Northern Kentucky University was selected for his article "Of memories, neurons, and rank-one corrections", *The College Mathematics Journal*, January 1997. AIMEE JOHNSON of Swarthmore College and KATHLEEN MADDEN of Drew University were honored for their article "Putting the pieces together: Understanding Robinson's nonperiodic tilings", *The College Mathematics Journal*, May 1997.

The Lester R. Ford award honors articles published in *The American Mathematical Monthly* and carries a cash prize of $500. The awardees for 1998 are: S. C. COUTINHO of the Federal University of Rio de Janeiro for the article "The many avatars of a simple algebra", *Monthly*, August-September 1997; JUDITH V. GRABINER of Pitzer College in Claremont, California, for her article "Was Newton's calculus a dead end? The continental influence of Maclaurin's *Treatise of Fluxions*", *Monthly*, May 1997; and BRUCE POURCIAU of Lawrence University for the article "Reading the Master: Newton and the birth of celestial mechanics", *Monthly*, January 1997.

The Chauvenet Prize carries a cash award of $1,000 and is given to a member of the MAA for an outstanding expository article on a mathematical topic. The recipients of the 1998 Chauvenet Prize are ALAN EDELMAN of the Massachusetts Institute of Technology and ERIC KOSTLAN for the article "How many zeros of a random polynomial are real?", published in the *Bulletin of the American Mathematical Society (N.S.)* **32** (1995).

—Elaine Kehoe

London Mathematical Society Prizes Awarded

The London Mathematical Society has announced the awarding of several prizes for 1998.

The De Morgan Medal for outstanding contributions to mathematics has been awarded to ROBERT A. RANKIN of Glasgow University, for his major contributions to the theory of numbers and in particular to the theory of modular forms. His achievements include new estimates of the differences between consecutive prime numbers, results on the distribution of zeros of Poincaré series, and work on cusp forms and the number of representations of an integer by the sum of eight or more squares. His work on the theory of the Ramanujan tau function and similar arithmetical functions gave birth to the method now usually known as the Rankin-Selberg method. The immediate application of his method was a nontrivial estimate for the coefficients of modular forms, which was used by Deligne and Serre in their work relating cusp forms to Artin L-functions. The spirit of this method influenced Deligne's proof of the Weil conjectures.

The Senior Berwick Prize, given for an outstanding piece of mathematical research, was awarded to BRIAN DAVIES of King's College, London, for his survey article "L^p spectral theory of higher order elliptic operators", published in the *Bulletin of the London Mathematical Society*. The article is representative of Davies's contributions to the development of operator theory, his fundamental work on heat semigroups, and his more recent work on higher-order operators.

The Junior Whitehead Prizes are given annually to mathematicians under forty years of age. The 1998 awardees are JONATHAN CHAPMAN and JAN NEKOVAR (Cambridge University), and IGOR RIVIN (Warwick University). Chapman received the prize for his contributions to the mathematical theory of superconductivity and other areas of applied mathematics. He has developed new methodologies for high-precision asymptotics for differential and difference equations and a construction for isospectral drums with different rectilinear boundaries. Nekovar has used a wide range of tools from modern arithmetic algebraic geometry in his work on a number of important problems. His contributions include an extension of Kolyvagin's method to higher weight modular forms, a theory of p-adic height pairings for very general Galois representations, and an analogue of the Gross-Zagier result. He is currently working on syntomic regulators, a project central to current developments in arithmetic algebraic geometry. Rivin's award is for his work on hyperbolic geometry. His thesis gave a complete description of the possible dihedral angles of compact convex polyhedra in hyperbolic three-space. Subsequently he developed, with C. Hodgson, further techniques to understand the finite volume case. He has also studied the relation between ideal hyperbolic polyhedra and local Euclidean structures on triangulated surfaces and has solved many important nonlinear problems in hyperbolic geometry by transforming them into tractable linear ones.

—From an LMS announcement

USA Wins Medals at Mathematical Olympiad

A team of six American high school students won six medals at the 39th Annual International Mathematical Olympiad (IMO), held in Taipei, Taiwan, on July 15 and 16, 1998. Competing against teams from 76 countries, the USA finished in third place, behind Iran and Bulgaria. Each team member won either a gold or silver medal.

The winning team members were: REID BARTON (Arlington, Massachusetts, home schooled), gold medalist; GABRIEL CARROLL (Oakland Technical High School, Oakland, California), gold medalist; KEVIN LACKER (Sycamore High School, Cincinnati, Ohio), silver medalist; ALEXANDER SCHWARTZ (Radnor High School, Radnor, Pennsylvania), gold medalist; PAUL VALIANT (Milton Academy, Milton, Massachusetts), silver medalist; and MELANIE WOOD (Park Tudor High School, Indianapolis, Indiana), silver medalist. The team was chosen on the basis of the youngsters' performance in the 27th USA Mathematical Olympiad held in May, and team members attended the Mathematical Olympiad Summer Program at the University of Nebraska-Lincoln. They were coached by Titu Andreescu (Illinois Mathematics and Science Academy) and were also accompanied by Elgin Johnston (Iowa State University) and Walter E. Mientka (University of Nebraska-Lincoln). The USA Mathematical Olympiad is a program of the American Mathematics Competitions. Financial and program support is provided by the Army Research Office, the Office of Naval Research, the Microsoft Corporation, Wolfram Research, Inc., the Matilda R. Wilson Fund, and the University of Nebraska-Lincoln.

—From an MAA announcement

Deaths

WILLIAM A. BLANKINSHIP, of Pasadena, MD, died on June 4, 1998. Born on August 18, 1920, he was a member of the Society for 56 years.

HAROLD L. DORWART, professor emeritus at Trinity College, Hartford, CT, died on July 28, 1998. Born on August 27, 1902, he was a member of the Society for 70 years.

DICKRAN H. ERKILETIAN, professor emeritus at the University of Missouri-Rolla, died in June 1997. Born on September 22, 1913, he was a member of the Society for 56 years.

SIEGFRIED K. GROSSER, of Vienna University, died in January 1998. Born on November 12, 1931, he was a member of the Society for 34 years.

I. HENSON HARRIS, of Mayfield, KY, died on March 15, 1998. Born on December 12, 1912, he was a member of the Society for 51 years.

ROBERT F. JACKSON, of Toledo, OH, died on July 30, 1997. Born on January 2, 1909, he was a member of the Society for 61 years.

HEWITT KENYON, professor emeritus at George Washington University, died on June 18, 1998. Born on August 31, 1920, he was a member of the Society for 48 years.

THOMAS H. KIRKPATRICK, of Sun City, AZ, died on May 12, 1998. Born on May 3, 1908, he was a member of the Society for 41 years.

HASELL T. LABORDE, of Macon, GA, died on July 16, 1998. Born on December 1, 1921, he was a member of the Society for 47 years.

WILLIAM N. REINHARDT, of the University of Colorado, died on June 22, 1998. Born on May 12, 1939, he was a member of the Society for 33 years.

IRVING SEGAL, of the Massachusetts Institute of Technology, died on August 31, 1998. Born on September 13, 1918, he was a member of the Society for 60 years.

Visiting Mathematicians

(Supplementary List)

Mathematicians visiting other institutions internationally during the 1998–99 academic years were listed in the following 1998 issues of the *Notices*: June/July, pp. 730–31; August, p. 885; September, p. 994; and October, p. 1177. The following is an update (home country is listed in parentheses).

SHENGWENG WANG (China), Central Michigan University, Operator Theory, 9/98–12/98.

TOMAS ZDRAHAL (Czechoslovakia), Central Michigan University, Numerical Analysis, 9/98–5/99.