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# Mathematics People

## SIAM Prizes Awarded

The Society for Industrial and Applied Mathematics (SIAM) awarded several prizes at its annual meeting in Portland, Oregon, in July 2004.

ROLAND GLOWINSKI of the University of Houston was awarded the 2004 Theodore von Kármán Prize for his sustained, outstanding contributions to mechanics and applied and computational mathematics, especially in the area of complex problems in fluid mechanics. The prize carries a cash award of \$1,000 and is given for a notable application of mathematics to mechanics and/or the engineering sciences made during the five to ten years preceding the award.

ARTHUR J. KRENER of the University of California, Davis, won the 2004 W. T. and Idalia Reid Prize for fundamental contributions to control and estimation of nonlinear dynamical systems and stochastic processes.

DIEGO DOMINICI of the University of Illinois at Chicago was awarded the 2004 Richard C. DiPrima Prize for his dissertation "Asymptotic Analysis of a Data-Handling System and Its Generalization". The prize carries a cash award of \$1,000.

The 2004 George Pólya Prize was awarded jointly to NEIL ROBERTSON of Ohio State University and PAUL SEYMOUR of Princeton University for their proof of the Wagner conjecture in the theory of graph minors. A cash award of \$20,000 will be divided between the winners.

ALAN C. NEWELL of the University of Arizona was awarded the John von Neumann Lectureship in recognition of his pioneering research in nonlinear evolution equations modeling physical systems. The prize carries a cash award of \$2,500.

RICHARD A. TAPIA of Rice University received the 2004 SIAM Prize for Distinguished Service to the Profession. The prize is awarded to an applied mathematician who has made distinguished contributions to the furtherance of applied mathematics on the national level.

—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 Providence, Rhode Island, in August 2004.

The Carl B. Allendoerfer Awards are given for articles published in *Mathematics Magazine* and carry a cash award of \$500. The 2004 awards were given to CHARLES I. DELMAN and GREGORY GALPERIN of Eastern Illinois University for their joint article "A tale of three circles", *Mathematics Magazine*, February 2003.

The Trevor Evans Award is given to authors of expository articles that are accessible to undergraduates and that were published in *Math Horizons*. This prize carries a cash award of \$250. Two awards were presented for 2004. DOUGLAS DUNHAM of the University of Minnesota, Duluth, was selected for his article "A tale both shocking and hyperbolic", *Math Horizons*, April 2003. HUGH MCCAGUE of York University, York, Ontario, was honored for his article "A mathematical look at a medieval cathedral", *Math Horizons*, April 2003.

The Lester R. Ford Award honors articles published in *The American Mathematical Monthly* and carries a cash prize of \$500. Four awards were made for 2004. NOAM ELKIES of Harvard University was selected for his article "On the sums  $\sum_{k=-\infty}^{\infty} (4k+1)^{-n}$ ", *The Monthly*, August–September 2003. CHARLES LIVINGSTON of Indiana University was honored for his article "Enhanced linking numbers", *The Monthly*, May 2003. R. MICHAEL RANGE of the State University of New York at Albany was honored for his article "Complex analysis: A brief tour into higher dimensions", *The Monthly*, February 2003. RÜDIGER THIELE of the University of Leipzig was selected for his article "Hilbert's twenty-fourth problem", *The Monthly*, January 2003.

The George Pólya Award is given for articles published in *The College Mathematics Journal* and has a cash prize of \$500. GREG N. FREDERICKSON of Purdue University was honored for his article "A new wrinkle on an old folding problem", *College Mathematics Journal*, September 2003.

The Chauvenet Prize for Expository Writing consists of a cash prize of \$1,000 and is awarded to the author of an outstanding expository article on a mathematical topic by a member of the MAA. The 2004 awardee is EDWARD B. BURGER of Williams College for his article "Diophantine Olympics and world champions: Polynomials and primes Down Under", *The American Mathematical Monthly*, November 2000.

The Henry L. Alder Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member honors a beginning college or university teacher whose teaching has been extraordinarily successful and whose effectiveness in teaching undergraduate mathematics is shown to have influence beyond his or her own classroom. The two awardees for 2004 are FRANCIS E. SU of Harvey Mudd College and ZVEZDELINA STANKOVA of Mills College. The award carries a cash prize of \$1,000.

—From an MAA announcement

## B. H. Neumann Awards Given

The B. H. Neumann Awards for 2004 have been presented by the Board of the Australian Mathematics Trust to ANTHONY J. GUTTMANN, University of Melbourne; ANNA NAKOS, Temple Christian College, Adelaide; and JAMIE SIMPSON, Curtin University of Technology, Perth. 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

## Vadhan Receives ONR Young Investigator Award

The Office of Naval Research (ONR) has announced the awarding of twenty-six grants in the 2004 ONR Young Investigators Program competition. SALIL P. VADHAN of Harvard University was awarded a grant to study pseudo-randomness and applications.

The Young Investigator Program supports basic research by exceptional faculty at U.S. universities who have received Ph.D.'s or equivalent degrees within the preceding five years. Grants to their institutions provide up to \$100,000 per year for three years. The funds may be applied to a variety of research costs, including salary, graduate student support, laboratory supplies, and operating costs. Young Investigators are selected on the basis of prior professional achievement, the submission of a meritorious research proposal, and evidence of strong support by their respective universities. The program supports outstanding research in a wide range of science and engineering fields that are critical to the evolution of a first-rate Navy and Marine Corps.

—From an ONR announcement

## AMS Menger Awards at the 2004 ISEF

The 2004 Intel-International Science and Engineering Fair (ISEF) was held May 9–15 in Portland, Oregon. This was the fifty-fifth year of the ISEF competition. More than twelve hundred ninth- through twelfth-graders from the United States and abroad competed in the fair. The participants had qualified by winning competitions in local, regional, and state fairs in the United States or national science fairs abroad. The ISEF administers the general awards. In addition more than fifty organizations, including the American Mathematical Society, participated by presenting special awards at the ISEF. The prizes awarded by the AMS included cash prizes, certificates, books, and briefcases.

This was the seventeenth year that the AMS participated in the ISEF, and it marked the fifteenth year of the presentation of the Karl Menger Awards. The members of the 2003–2004 AMS Menger Prize Committee are Elwyn Berlekamp, University of California at Berkeley; Gisèle Goldstein, University of Memphis (chair); and Hugh Montgomery, University of Michigan, Ann Arbor. The Special Awards Panel of Judges for the AMS this year consisted of the members of the AMS Menger Prize Committee and Paul Latiolais, Portland State University. The panel of judges reviewed more than sixty-five individual and team projects in the fields of mathematics, physics, and computer science.

Each entrant under consideration for a Menger Prize was interviewed by a member of our panel, and finalists were interviewed by the entire panel. The AMS gave one first-place award, two second-place awards, four third-place awards, and five honorable mention awards.



Menger Prize winners: Front row (left to right), Gisèle Goldstein (prize committee chair), Brett Harrison, Ilya Gurwich, Brian Rice; middle row, Huan-Chun Yeh, Brianna Satinoff, Ning Zhang, Sam Lewallen; back row, Nimish Ramanlal, Nurlan Bakitzhanov, Ginger Howell, Carlos Arreche-Aguayo, Allison Berke. Tair Assangali is not in the photograph.

## OCCIDENTAL COLLEGE, LOS ANGELES, CA ASSISTANT PROFESSORSHIP

Occidental College invites candidates for a tenure-track assistant professorship in the Department of Mathematics. A Ph.D. in mathematics is required. In addition, a strong commitment to teaching and research at a liberal arts institution is required. All areas of mathematics considered, preference given to candidates who do not overlap with expertise already found in the department.

The program supports students pursuing a range of professional and intellectual goals. Faculty members required to assist majors in their culminating senior projects, teach in mathematics and the general college curriculum, and encouraged to work with students in summer undergraduate research. Teaching schedule is the equivalent of 5 semester courses per year. For more information, visit <http://departments.oxy.edu/math>.

Applicants should submit a letter of interest demonstrating a commitment to academic excellence in a diverse liberal arts environment. The application must include a statement of teaching philosophy, with areas of teaching interest; plans for professional achievement, especially research; a curriculum vitae; samples of scholarly work; and 3 letters of recommendation to: **Faculty Search Office M8888, Attention: Dr. Ron Buckmire, Math Search Chair, Occidental College, 1600 Campus Road, Los Angeles, CA 90041.** Review of applications will begin December 1, 2004. Department representatives will attend the Joint Math Meetings in Atlanta.

*Occidental College is an equal opportunity employer committed to academic excellence in a diverse community and supporting interdisciplinary and multicultural academic programs that provide a gifted and diverse group of students with an educational experience that prepares them for leadership in a pluralistic world. Women and minorities are strongly encouraged to apply.*

## AMERICAN MATHEMATICAL SOCIETY

### Joint Mathematics Meetings

#### Mathematical Sciences Employment Center

Atlanta, Georgia, Joint Meetings

January 5-8, 2005

The Employment Center offers job interview opportunities to employers and Ph.D.-level mathematicians during the Joint Mathematics Meetings.

#### Employer/Applicant registration deadlines:

**October 25**—for Employment Center forms to appear in the Winter Lists of Employers and Applicants

**December 10**—advance deadline, (however, forms will not appear in Winter Lists) after which only on-site registration is possible

Program information and registration instructions for the Employment Center can be found at <http://www.ams.org/emp-reg/>. For further information call the AMS Membership and Programs Department at 800-321-4267, ext. 4113.

The Karl Menger Memorial Prize winners were as follows:

**First Place Award (\$1,000):** "A Proof of Seymour's Conjecture for All Oriented Graphs", **BRETT ALEXANDER HARRISON**, Half Hollow Hills High School West, Dix Hills, New York.

**Second Place Awards (\$500):** "Deviations from an Isotropic and Homogeneous Expansion of the Universe", **ILYA GURWICH**, Amit State Religious/Municipal Comprehensive School, Beer-Sheva, Israel; "On the Properties of Jump Points in the Game of  $n$ -times Nim", **BRIAN TODD RICE**, Marion Senior High School, Marion, Virginia.

**Third Place Awards (\$250):** "A Novel Set of Representations of the Two-Component Link Group and Consequent Link Invariants", **SAM JAY LEWALLEN**, Stuyvesant High School, New York, New York; "An Investigation of Irreducible Polynomials over  $\mathbb{Z}_p$  Using Abstract Algebra", **BRIANNA RACHEL SATINOFF**, Palm Harbor University High School, Palm Harbor, Florida; " $m \times n$  Admissible Boards", **HUAN-CHUN YEH**, Taipei Municipal Junior High School, Taipei, Taiwan; "Research on the Number-Reasoning Problem", **NING ZHANG**, the High School Affiliated to Fudan University, Shanghai, China.

**Honorable Mention Awards:** "The Membership Problem for Ideals in the Ring of Polynomials over the Integers  $\mathbb{Z}[x]$ ", **CARLOS EDUARDO ARRECHE-AGUAYO**, University Gardens High School, San Juan, Puerto Rico; "Constructing Boxes with  $N$ -tetracubes", **TAIR ASSANGALI** and **NURLAN BAKITZHANOV**, Kasakh-Turkish Lycée, Aktobe, Kazakhstan; "The Snake Lemma and Its Applications to Graph Theory", **ALLISON PAIGE BERKE**, Mira Loma High School, Sacramento, California; "Diophantine Equations: Which Numbers Are Linear Combinations?", **GINGER BEARDSLEE HOWELL**, Trinity Collegiate School, Darlington, South Carolina; "A Quantum Algorithm for the Simultaneous Evaluation of Functions: A Combinatorics Solution with Fractal Properties", **NIMISH P. RAMANLAL**, Seminole High School, Sanford, Florida.

The AMS's participation in the Intel-ISEF is supported in part by income from the Karl Menger Fund, which was established by the family of the late Karl Menger. For more information about this program or to make contributions to the fund, contact the AMS Development Office, 201 Charles Street, Providence, RI 02904-2294; send email to [development@ams.org](mailto:development@ams.org); or telephone 401-455-4111.

—Gisèle Goldstein, University of Memphis

**Editor's Note:** The September 2004 issue of the *Notices* carried an incorrect version of the announcement about the 2004 Menger Awards. The correct version appears here.