Mathematics People

Varga Awarded Hans Schneider Prize

RICHARD S. VARGA of Kent State University has been awarded the 2005 Hans Schneider Prize of the International Linear Algebra Society (ILAS). Varga received his Ph.D. from Harvard University in 1951. He has written six books and edited five and has published more than two hundred papers. He is editor in chief of the online journal *Electronic Transactions on Numerical Analysis* and is on the editorial boards of several journals and of the *Computational Mathematics* series. His research interests are numerical analysis, approximation theory, and linear algebra.

—From an ILAS announcement

Ben Green Awarded 2005 Salem Prize

The Salem Prize for 2005 has been awarded to BEN GREEN of the University of Bristol for his work in combinatorial number theory related to progressions in the primes—more specifically, his extension of Van der Corput's theorem on triples and his joint paper with Terry Tao on the existence of progressions of arbitrary length.

The prize committee for 2005 consisted of J. Bourgain, C. Fefferman, P. Jones, N. Nikolski, P. Sarnak, and J-C. Yoccoz.

The Salem Prize is awarded yearly to young researchers for outstanding contributions in the field of analysis.

Previous recipients of the Salem Prize include: N. Varopoulos (1968), R. Hunt (1969), Y. Meyer (1970), C. Fefferman (1971), T. Körner (1972), E. M. Nikishin (1973), H. Montgomery (1974), W. Beckner (1975), M. R. Herman (1976), S. B. Bočkarëv (1977), B. E. Dahlberg (1978), G. Pisier (1979), S. Pichorides (1980), P. Jones (1981), A. B. Aleksandrov (1982), J. Bourgain (1983), C. Kenig (1984), T. Wolff (1985), N. G. Makarov (1986), G. David (1987), J. L. Journé (1987), A. L. Vol'berg (1988), J-C. Yoccoz (1988), S. V. Konyagin (1990), C. McMullen (1991), M. Shishikura (1992), S. Treil (1993), K. Astala (1994), H. Eliasson (1995), M. Lacey (1996), C. Thiele (1996), T. Wooley (1998), F. Nazarov (1999), T. Tao (2000), O. Schramm (2001), S. Smirnov (2001), Xavier Tolsa (2002), E. Lindenstrauss (2003), and K. Soundararajan (2003).

—Jean Bourgain, Institute for Advanced Study, Princeton

2005 AMS Menger Awards

The 2005 Intel International Science and Engineering Fair (ISEF) was held May 8–14 in Phoenix, Arizona. This was the fifty-sixth year of the ISEF competition. More than 1,400 students from over forty countries competed in the fair. The participants qualified by winning competitions in local and regional 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 AMS, participated by presenting special awards at the ISEF. Prizes awarded by the AMS included cash, certificates, books, and briefcases.

This is the eighteenth year of AMS participation in the ISEF, and it marked the sixteenth year of the presentation of the Karl Menger Awards. The members of the 2004–2005 AMS Menger Prize Committee and AMS Special Award Judges were Elwyn Berlekamp, University of California, Berkeley (chair); Gisele Goldstein, University of Memphis; Dmitry Fuchs, University of California, Davis, and Tatiana Shubin, San José State University. The panel of judges reviewed more than one hundred individual and team projects in the fields of mathematics, physics, and computer science. A member of the panel interviewed each entrant under consideration for a Menger Prize, and the entire panel interviewed the finalists. The AMS gave awards to one first-place, two second-place, and four third-place projects, and honorable mention to five others.

The Karl Menger Memorial Prize winners are as follows.

First-Place Award of $1,000: "On Universality Properties of Positive-Definite Integral Quadratic Forms", SCOTT DUKE KOMINERS, 18, Walt Whitman High School, Bethesda, Maryland.

Second-Place Award of $500: "Classification of Determinantal Sequences", SAMUEL MOHUN BHAGWAT, 16, Winston Churchill High School, Livonia, Michigan; "Complete Sequences of Positive Integers", KLEDIN DOBI, 16, Julia R. Masterman High School, Philadelphia, Pennsylvania.

Menger Prizes group photo: Back row (left to right), Elad Oster, John Sillcox, Oleg Mikhaylovsky, Vladimir Trubnikov, Niket Pandey, Carlos Fonseca; Middle (l. to r.), Kledin Dobi, Mikhail Ptichkin, Matthew Tierney, Paul Jacobs, Scott Kominers, Manuel Rivera; Front (l. to r.), Valentina Dobrovolskaya, Robert Cordwell, Samuel Bhagwat, Prize Committee Chair Elwyn Berlekamp.

Third-Place Award of $250: "Finding Varieties in Nonlinear Systems Using Algebraic-Geometry and Maple", MATTHEW RYAN TIERNEY, 17, Westview High School, Portland, Oregon; "A New Look at Cayley's Problem: Investigation of the Convergence of the Newton Algorithm Using Quaternions", ELAD OSTER, 18, Israeli Arts and Science Academy, Jerusalem, Israel; "Nonagonal Numbers in the Fibonacci Sequence and Related Diophantine Equations", JOHN MICHAEL SILLCOX, 18, Jericho High School, Jericho, New York; "On Structures Determined by Configurations on R^n", CARLOS MANUEL FONSECA, 18, and MANUEL LUIS RIVERA, 16, Colegio San Ignacio de Loyola, Rio Piedras, Puerto Rico.

Honorable Mention Award: "Investigating the Changes in the Poincaré Algebra and Group by Enlarging the Space-Time Dimensions", NIKET RANJAN PANDEY, 16, Bethel High School, Hampton, Virginia; "Some Results on Inclusive and Exclusive Partitions of Complete Graphs", ROBERT THOMAS CORDWELL, 18, Manzano High School, Albuquerque, New Mexico; "Graph Isomorphic Lattice Paths," PAUL FRANCIS JACOBS, 18, Good Hope School, St. Croix, Virgin Islands; "Discrepancy of Planar Parallelelipipedal Meshes", VALENTINA N. DOBROVOLSKAYA, 16, Advanced Education and Science Center, Moscow, Russia; "Classification of Rational Associative Operations", VLADIMIR N. TRUBNIKOV, 17, OLEG V. MIKHAYLOVSKY, 16, and MIKHAIL A. PTICHKIN, 17, Centre of Mathematical Education, Saint Petersburg, Russia.

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 USA; send email to development@ams.org; or telephone 401-455-4111.

—AMS announcement

Royal Society of London Elections

Five mathematical scientists are among those elected as new fellows and foreign members of the Royal Society of London for 2005. They are: MARTIN T. BARLOW, University of British Columbia, for contributions to mathematical probability; DAVID W. MASSER, Universität Basel, for contributions to transcendence and diophantine geometry; LLOYD N. TREFETHEN, University of Oxford, for contributions to numerical analysis and its applications to applied mathematics and engineering science; and RICHARD S. WARD, University of Durham, for research in mathematical physics. Elected as a foreign member was RAOUL BOTT, Harvard University, for mathematical contributions that have underpinned the major advances in geometry and topology in the past fifty years.

—From a Royal Society announcement

Humboldt Foundation Research Awards

The Alexander von Humboldt Foundation grants up to one hundred Humboldt Research Awards annually to scientists and scholars from abroad with internationally recognized academic qualifications. The research award honors the academic achievements of the award winner's lifetime. Award winners are invited to carry out research projects of their own choice in Germany in cooperation with colleagues for periods of between six months and one year. The award can amount to a maximum of €75,000.

Among those receiving Humboldt Research Awards in 2005 are five mathematicians. Below are listed their names, home institutions, and the institutions in Germany that they will visit.

SUSANNE C. BRENNER, University of South Carolina: Humboldt Universität Berlin, Max-Planck-Institut für Mathematik in den Naturwissenschaften in Leipzig, Universität Augsburg, and Universität Hannover; RICHARD E. EWING, Texas A&M University: Universität Stuttgart; IDUN REITEN, Norwegian University of Science and Technology: Universität Bielefeld; ALAN L. SELMAN, State University of New York at Buffalo: Universität Würzburg, Universität Düsseldorf, and Universität Ulm; and JUAN J. L. VELAZQUEZ, Universidad Complutense de Madrid: Humboldt-Universität Berlin and Max-Planck-Institut für Mathematik in den Naturwissenschaften in Leipzig.

—Allyn Jackson