Mathematics People

Ferran Sunyer i Balaguer Prize Awarded

The Institut d'Estudis Catalans has awarded the fourth Ferran Sunyer i Balaguer Prize to V. KUMAR MURTY of the University of Toronto and M. RAM MURTY of McGill University for their monograph, *Non-vanishing of L-functions.*

According to the citation for the prize, the book brings together a collection of results on the non-vanishing of L-functions and a wide variety of mathematical problems arising in different contexts. The book covers such topics as Artin L-functions, Deligne's prime number theorem, modular L-functions, the Sato-Tate conjecture on the distribution of Fourier coefficients of modular forms, average values of L-functions, etc. The citation also notes that the authors have made significant contributions to this area.

The prize consists of 1,800,000 pesetas (approximately $14,500). The book will be published in Birkhäuser Verlag's "Progress in Mathematics" series.

The Ferran Sunyer i Balaguer Prize is awarded each year to an expository monograph in an active area of mathematical research in which the author(s) have made important contributions. The prize honors the self-taught Catalan mathematician Ferran Sunyer i Balaguer (1912–1967), who, in spite of a serious physical disability, was very active in research in classical analysis and gained an international reputation. For information on how to submit a manuscript for consideration for the prize, see the For Your Information section of this issue of the *Notices.*

—from announcement of Institut d'Estudis Catalans

CAREER Awards Made

The National Science Foundation has announced the names of awardees in a new program designed to encourage scientists and engineers to integrate their research and education efforts earlier in their careers. The Faculty Early Career Development (CAREER) program grants are awarded to junior-level university faculty. Out of 1,735 proposals submitted, 337 were awarded grants, including 4 in the mathematical sciences. The 3–5 year grants range from $70,000 to $300,000.

TASSO KAPER, Boston University, Dynamical systems theory motivated by bubbles, accelerators and split-operator numerical schemes; BONNIE RAY, New Jersey Institute of Technology, Nonparametric methods for time series analysis with environmental and economic applications; PETER SMEREKA, University of Michigan, Deriving effective equations for bubbly fluids using kinetic theory and developing mathematics classes for engineers; and KAREN SMITH, University of Michigan, Interactions of commutative algebras with analysis, geometry and computer science.

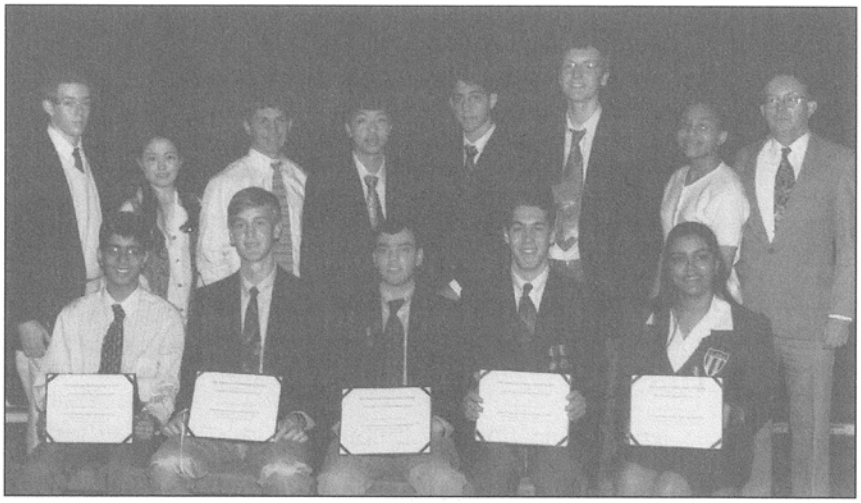
—NSF Announcement

AMS Menger Awards at Science and Engineering Fair

For the ninth time, the AMS has presented the Karl Menger Memorial Awards at the International Science and Engineering Fair (ISEF).

This year's ISEF was held May 5–11, 1996, in Tucson, Arizona, with 1,007 projects distributed over sixteen categories of science and engineering. Prizes ranged over plaques, certificates, T-shirts, books, magazine/journal subscriptions, organization memberships, and cash prizes totaling over $200,000. In addition to ISEF recognition, there were special awards made by representatives from 66 groups, including professional organizations, industry, and branches of the military.

Each student entry qualified by winning a state, regional, or (in the case of some foreign students) national competition to reach the finals at ISEF. The AMS judging panel considered 48 projects, including all projects entered in mathematics and one in physics involving an innovative application of mathematics. Each panel member inspected each project, and each student was interviewed by at least one member of the panel. Winners (one first place, two second place, four third place) were given cash prizes, and they and honorable mention students were given copies of *What's Happening in the Mathematical Sciences* by Barry Cipra and a short biography of Karl Menger, for whom the awards are named. The prize winners were as follows.



AMS Menger awards
Back row, left to right: J. Stone, L. Williams, R. Hebert, K. Kay, S. Sanders, C. Sorenson, Y. Wood, P. V. O'Neil (AMS panel).
Front row: D. Maulik, N. Eriksson, L. Kleinwaks, E. Landquist, V. Miranda-Diaz.

First place ($1,000): Davesh Maulik, junior, Roslyn High School, Roslyn Heights, New York, "Polynomial Automorphisms of Splitting Fields". Maulik has distinguished himself by winning first place for an unprecedented third year.

Second place ($500 each): Nicholas Karl Eriksson, junior, Sentinel High School, Missoula, Montana, "Elementary Proofs of Apery Number Congruences"; and Logan Joseph Kleinwaks, junior, Thomas Jefferson High School for Science and Technology, Alexandria, Virginia, "Computational Model of Quantum Dot Diatomic Molecule".

Third place ($250 each): Eric Jon Landquist, senior, Massachusetts Academy of Mathematics and Science, Worcester, Massachusetts, "Expansions in a Special Family of Irrational Base Systems"; Vanesa Miranda-Diaz, junior, Carmen Belen Veiga High School, Juana Diaz, Puerto Rico, "Sequences of Continued Fractions and Its Relation with Egyptian Fractions"; Jason Charles Stone, senior, Westmoore High School, Oklahoma City, Oklahoma, "Utilizing a Cancellation Algorithm to Improve the Bounds of $R(5, 5)$"; Lauren Kiyomi Williams, senior, Palos Verdes Peninsula High School, Rolling Hills Estates, California, "Enumerating N-Step Up-Side Self-Avoiding Walks".

Honorable Mention: Ryan Thomas Hebert, junior, Catholic High School, New Iberia, Louisiana, "Coordinates, Equations, and Area in Non-perpendicular Coordinate Systems"; Kendrick Norris Kay, sophomore, Lakeside High School, Evans, Georgia, "Pick's Theorem in Three Dimensions and Beyond"; Scott Nicholas Sanders, junior, Ely High School, Pompano Beach, Florida, "Finite, Orthogonal, Binary Wavelet Set for Multiresolution Analysis and Data Compression"; Claus Mazanti Sorensen, senior, Aarhus University, Aarhus, Denmark, "On the Factorization of $n!$ A Hypothesis of Selfridge and the Equation $n! = x^2 + y^2$"; and Yvette Karen Wood, senior, Oxon Hill Science and Technology Center, Oxon Hill, Maryland, "Do Cardiac Arrythmias Have Chaotic Tendencies?"

As the titles indicate, the projects were remarkable for their breadth and for the quality of the work by the students. It should also be noted how many of the awards went to sophomores and juniors.

This year's AMS panel consisted of seven mathematicians: John D. Brillhart and David Gay, both of the University of Arizona; Jerome Goldstein, Louisiana State University; Fred Martens, Marius Nkashama, and Peter V. O'Neil (chair), all of the University of Alabama at Birmingham; and Julian Palmore, University of Illinois.

The Society's participation in 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, contact Timothy Goggins, AMS Development Officer, by e-mail (`tjg@ams.org`) or by telephone (401-455-4110).

—Peter V. O'Neil

NSF Minority Graduate Fellowships Announced

The National Science Foundation has announced awards in its Minority Graduate Fellowship Program. This program provides support for minority students pursuing doctoral study in all areas of science and engineering.

Two awards were made to students in the mathematical sciences: ALFONSO FERNANDEZ AGNEW, an undergraduate from California State University, Fullerton, plans to

attend Oregon State University; and MONICA MARIA ROMEO, an undergraduate from Tulane University, plans to attend Brown University. [Editor's note: The institutions of graduate study listed here are from the students' original application forms. In some cases, students may have switched institutions by the time the fellowship tenure begins.]

—NSF Announcement

NSF Graduate Fellowships Announced

The National Science Foundation has announced awards in its Graduate Fellowship Program. This program provides support for students pursuing doctoral study in all areas of science and engineering. Listed below are the names of the 1996 awardees in the mathematical sciences, followed by their undergraduate institutions (in parentheses), and the institution at which they plan to pursue graduate work. [Editor's note: The institutions of graduate study listed here are from the students' original application forms. In some cases, students may have switched institutions by the time the fellowship tenure begins.]

JARED EMERY ANDERSON (University of Victoria) Princeton University; ELIZABETH CAROL AYER (Duke University) Cornell University; MANJUL BHARGAVA (Harvard University) Princeton University; JOHN MEYER BOSSERT, (Princeton University) Massachusetts Institute of Technology; RUTH ALEXANDRA BRITTO-PACUMIO (Massachusetts Institute of Technology) Harvard University; DANIEL GREGORY BROWN (Massachusetts Institute of Technology) Cornell University; DANNY CORNELIUS CALEGARI (University of Melbourne, Australia) University of California, Berkeley; MARY PATRICIA CAMPBELL (North Carolina State University) Massachusetts Institute of Technology; DAWN MARIE CHAMBERLAIN (Massachusetts Institute of Technology) Cornell University; AMY KRISTINE DARKE (University of Washington) University of Washington; YEVGENIY DODIS (New York University) Massachusetts Institute of Technology; MARINA A. EPELMAN (Cornell University) Massachusetts Institute of Technology; DAVID LAWRENCE FEARNLEY (Brigham Young University) University of Oxford, England; WUNG-KUM FONG (University of California, Berkeley) Massachusetts Institute of Technology; KIRAN SRIDHARA KEDLAYA (Harvard University) Princeton University; JASON MICHAEL KLINE (Vanderbilt University) Massachusetts Institute of Technology; PAUL LI (Harvard University) University of Illinois at Chicago; JOHN REDDINGTON LOCKWOOD (Duke University) Carnegie-Mellon University; ADAM JEFFERSON MERSEREAU (Princeton University) Cornell University; JESSICA LYNN MILLAR (University of Illinois at Chicago) Harvard University; BENJAMIN JAMES MORRIS (University of California, Berkeley) University of California, Berkeley; LENHARD LEE NG (Harvard University) Princeton University; NEHAL MANHAR PATEL (Massachusetts Institute of Technology) University of California, Berkeley; SEAN T. PAUL (University of Oklahoma) State University of New York at Stony Brook; THOMAS PIETRAHO (University of Illinois at Chicago) Massachusetts Institute of Technology; RYAN CHAUNCEY SIDERS (University of Minnesota) Princeton University; JASON MICHAEL STARR (University of California, Berkeley) Harvard University; ERIC ALAN STONE (University of Florida) Harvard University; JENNIFER SUN (Harvard University) Massachusetts Institute of Technology; JOHN HUNTER TART (Wake Forest University) University of Wisconsin, Madison; DYLAN PAUL THURSTON (Harvard University) University of California, Berkeley; JESSICA A. WACHTER (Harvard University) Massachusetts Institute of Technology; THOMAS CRAWFORD WATSON (Rice University) Princeton University; JOHN LLOYD WEATHERWAX (University of Missouri, Columbia) Brown University; and THOMAS ALEXANDER WESTON (Massachusetts Institute of Technology) Harvard University.

—NSF Announcement

USA Olympiad Winners Announced

Eight high school students who earned top scores in the 1996 USA Mathematical Olympiad (USAMO) have been named as team members and alternates for the 1996 International Mathematical Olympiad.

The first-place winner of the USAMO is CHRISTOPHER CHANG of Palo Alto, California, who is in his third year as a top-scorer in the competition. Another USAMO veteran who placed among the top-scorers this year is JOSH P. NICHOLS-BARRER of Newton Center, Massachusetts. The other winners are CARL J. BOSLEY of Topeka, Kansas, NATHAN G. CURTIS of Alexandria, Virginia, MICHAEL R. KORN of Arden Hills, Minnesota, CARL A. MILLER of Silver Spring, Maryland, ALEXANDER H. SALTMAN of Austin, Texas, and DANIEL A. STRONGER of New York, New York.

The winners were honored in a ceremony held June 3 at the National Academy of Sciences in Washington, DC. After four weeks of intensive training at the University of Nebraska at Lincoln, the US Olympiad Team will compete with teams from seventy countries in Bombay, India, between July 7 and 17.

—from MAA News Release

1996 Alice T. Schafer Prize Winner Named

IOANA DUMITRIU, a first year student at New York University's Courant Institute of Mathematical Sciences, is the winner of the seventh annual Alice T. Schafer Mathematics Prize. The Schafer Prize is awarded to an undergraduate woman in recognition of excellence in mathematics and is sponsored by the Association for Women in Mathematics (AWM). Dumitriu will receive a cash prize of $1,000.

Ioana Dumitriu

The Schafer Prize was established in 1990 by the executive committee of the AWM and is named for former AWM president and one of its founding members, Alice T. Schafer, who has contributed a great deal to women in mathematics throughout her career. The criteria for selection includes, but is not limited to, the quality of the nominees' performance in mathematics courses and special programs, exhibition of real interest in mathematics, ability to do independent work, and if applicable, performance in mathematical competitions.

The 19-year-old Dumitriu came from Romania for her undergraduate studies and immediately began taking graduate-level courses. Her professors describe her as "truly exceptional", "extremely impressive", "absolutely brilliant", and a student "whose mathematical instincts, talent, and knowledge are apparent almost from the beginning." They also remark on her exceptional problem solving abilities and "great independence of thought and originality". This was confirmed when she won this year's Elizabeth Lowell Putnam Prize for her performance in the Putnam Competition. As one letter states, "There is no doubt that Ioana will become a mathematician, the only question is whether she will be a world class mathematician. I can't think of anyone whose chances are better."

KAREN BALL, a senior at Grinnell College and WUNGKUM FONG, a senior at the University of California, Berkeley, were declared runners-up and will each receive $150. AWM also awarded an Honorable Mention citation to TARA S. HOLM from Dartmouth College. The prize presentation will be held July 22, 1996, in conjunction with the Annual Meeting of the Society for Industrial and Applied Mathematics, July 22–26, 1996, in Kansas City.

"There were many outstanding nominees this year, each with her own style and her own strengths," stated Ruth Charney of Ohio State University, chair of the 1996 Schafer Prize Committee. "It was very difficult to choose a winner. We are pleased to be able to recognize these four exceptional young women." Also serving on the committee were Emma Previato of Boston University and Janet C. Talvacchia of Swarthmore College.

The Alice T. Schafer Mathematics Prize is funded by an endowment with continuing contributions from AWM members and others. For further information, contact AWM, 4114 Computer and Space Sciences Building, University of Maryland, College Park, MD 20742-2461.

—from AWM News Release

Deaths

WYLLIS BANDLER, professor at Florida State University, died on December 22, 1995. Born on July 3, 1916, he was a member of the Society for 11 years.

ESTHER A. COMPTON, retired senior professor at Cumberland College, Williamsburg, Kentucky, died on October 12, 1995. Born on March 28, 1908, she was a member of the Society for 33 years.

CARL H. DENBOW, professor emeritus of Ohio University, died on August 6, 1994. Born on December 13, 1911, he was a member of the Society for 58 years.

LAWRENCE G. DEYSACH, resident fellow at Northeastern Illinois University, died on December 3, 1995. Born in July, 1936, he had been a member of the Society for 5 months.

KARL-HEINZ HELWIG, professor at Technical University of Munich, Germany died on February 2, 1996. Born on June 24, 1936, he was a member of the Society for 31 years.

ALBERT JAQUA, of Los Angeles, California, died on March 31, 1996. Born on December 31, 1922, he was a member of the Society for 37 years.

WILLIAM I. LAYTON, professor emeritus of Newberry College, Newberry, South Carolina, died on April 19, 1996. Born on September 26, 1913, he was a member of the Society for 44 years.

EDMONTS G. LINAMEGI, of Elkhart, Indiana, died on June 6, 1995. Born on September 29, 1942, he was a member of the Society for 21 years.

JAMES E. MARTIN, of Banning, California, died on November 15, 1995. Born on April 13, 1918, he was a member of the Society for 47 years.

CESAR DACORSO NETTO, of Rio de Janeiro, Brazil, died on April 25, 1996. Born on November 6, 1910, he was a member of the Society for 47 years.

KIYOSHI NIINO, professor at Kanazawa University, Kanazawa, Japan, died on September 20, 1995. Born on January 9, 1941, he was a member of the Society for 28 years.

JEFFREY S. REITMEYER, of Pennsylvania State University, died on February 19, 1996. Born on September 25, 1974, he was a member of the Society for 1 year.

SWARUPCHAND M. SHAH, professor emeritus of the University of Kentucky, died on April 21, 1996. Born on December 30, 1905, he was a member of the Society for 61 years.

RICHARD G. STONEHAM, professor emeritus of City College (CUNY). Born in February 1920, he was a member of the Society for 52 years.

GYORGY SZABO, of the Institute of Mathematics and Informatics, Kossuth Lajos University, Debrecen, Hungary, died on January 20, 1996. Born on April 6, 1952, he was a member of the Society for 2 years.

ROBERT W. THOMASON, of C.N.R.S., Paris, France, died in October 1995. Born on November 5, 1952, he was a member of the Society for 22 years.

JOHN B. WILKER, professor at Scarborough College, University of Toronto, died on October 10, 1995. Born on April 23, 1943, he was a member of the Society for 27 years.