Mathematics People

Kenyon Awarded 2007 Loève Prize

The 2007 Line and Michel Loève International Prize in Probability is awarded to RICHARD KENYON of the University of British Columbia. The prize, which carries a monetary award of US$30,000, will be presented at a ceremony in Berkeley in October 2007.

Richard Kenyon received his Ph.D. in 1990, advised by Bill Thurston at Princeton. His research has dealt with the interface between statistical mechanics, probability, and discrete conformal geometry. His 1997 paper "Local statistics of lattice dimers" studies uniform random dimer configurations (domino tilings) on a graph and shows how to perform many interesting calculations. This has come to be regarded as the seminal work in the subsequent emergence of a large field studying Gibbs distributions of combinatorial configurations, which has developed in unexpected directions. For instance: (i) His 2000 paper "Conformal invariance of domino tiling" proves that the height function of a random domino tiling of the two-dimensional lattice has a distribution which, in the scaling limit, is conformally invariant. (ii) His 2006 paper "Dimers and amoebae" (with Andrei Okounkov and Scott Sheffield) associates to any periodic bipartite planar graph a curve that can be used to describe the phase space of Gibbs distributions on dimer configurations and categorize them as gaseous, liquid, or frozen. Other aspects of this field involve spanning trees, matchings, the Gaussian free field, Harnack curves, and various models for random surfaces.

The Loève Prize commemorates Michel Loève, professor at the University of California, Berkeley, from 1948 until his untimely death in 1979. The prize was established by his widow, Line, shortly before her death in 1992. Awarded every two years, it is intended to recognize outstanding contributions by researchers in probability who are under forty-five years old.

—David Aldous, University of California Berkeley

Iliopoulos and Maiani Awarded 2007 Dirac Medal

JEAN ILIOPOULOS of the Laboratoire de Physique Théorique, École Normale Supérieure, and LUCIANO MAIANI of the Università degli Studi di Roma "La Sapienza" have been jointly awarded the 2007 Dirac Medal by the Abdus Salam International Centre for Theoretical Physics (ICTP). They were honored "for their work on the physics of the charm quark, a major contribution to the birth of the Standard Model, the modern theory of elementary particles."

The ICTP awarded its first Dirac Medal in 1985. Given in honor of P. A. M. Dirac, the medal is awarded annually on Dirac's birthday, August 8, to an individual or individuals who have made significant contributions to theoretical physics and mathematics. The medalists also receive a prize of US$5,000. An international committee of distinguished scientists selects the winners from a list of nominated candidates. The Dirac Medal is not awarded to Nobel laureates, Fields Medalists, or Wolf Foundation Prize winners.

—From an ICTP announcement

MAA Awards Presented

The Mathematical Association of America (MAA) presented several awards for excellence in expository writing and teaching at its Summer Mathfest, August 3–5, 2007, in San Jose, California.

The Trevor Evans Award is given to authors of expository articles that are accessible to undergraduates and that were published in *Math Horizons.* The prize carries a cash award of US$250. The prizes for 2007 were awarded to ADRIAN RICE and EVE TORRENCE, both of Randolph-Macon College, for their joint article "Lewis Carroll's condensation method for evaluating determinants", *Math Horizons*, November 2006; and to ROBERT BOSCH of Oberlin College for his article "Opt art", *Math Horizons*, February 2006.

The George Pólya Award is given for articles published in the *College Mathematics Journal* and has a cash prize of US$500. RICHARD JERRARD, emeritus professor at the University of Illinois; the late JOEL SCHNEIDER, formerly of Sesame Workshop; RALPH SMALLBERG, an independent developer of curricular software and educational television for children in New York City; and JOHN WETZEL, retired professor at the University of Illinois at Urbana-Champaign, were honored for their joint article, "Straw in a box", *College Mathematics Journal*, March 2006. ALLEN SCHWENK of Western Michigan University was recognized for his article "Distortion of average class size: The Lake Wobegon effect", *College Mathematics Journal*, September 2006.

The Carl B. Allendoerfer Award is given for articles published in *Mathematics Magazine* and has a cash prize of US$500. The 2007 awardees are CARL V. LUTZER of the Rochester Institute of Technology for his article "Hammer juggling, rotational instability, and eigenvalues", *Mathematics Magazine*, October 2006; and SAUL STAHL of the University of Kansas for his article "The evolution of the normal distribution", *Mathematics Magazine*, April 2006.

The Lester R. Ford Award is given for articles published in the *American Mathematical Monthly* and carries a cash prize of US$500. The following authors were honored for 2007: ANDREW GRANVILLE, University of Montreal, and GREG MARTIN, University of British Columbia, for their joint article "Prime number races", *American Mathematical Monthly*, January 2006; JEFFREY C. LAGARIAS, University of Michigan, for "Wild and Wooley numbers", *Monthly*, February 2006; LLUÍS BIBILONI, Universitat Autònoma de Barcelona, JAUME PARADÍS, Universitat Pompeu Fabra, Barcelona, and PELEGRÍ VIADER, Universitat Pompeu Fabra, Barcelona, for their joint article "On a series of Goldbach and Euler", *Monthly*, March 2006; HAROLD P. BOAS, Texas A&M University, for "Reflections on the Arbelos", *Monthly*, March 2006; and MICHAEL J. MOSSINGHOFF, Davidson College, for "A $1 problem", *Monthly*, May 2006.

The Merten M. Hasse Prize recognizes a noteworthy expository paper appearing in an MAA publication, at least one of whose authors is a younger mathematician. The 2007 prize was awarded to FRANKLIN MENDIVIL of Acadia University, Nova Scotia, Canada, for "Fractals, graphs, and fields", published in the *American Mathematical Monthly*, June–July 2003.

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 2007 awardees are TIMOTHY CHARTIER of Davidson College, SATYAN DEVADOSS of Williams College, and DARREN NARAYAN of the Rochester Institute of Technology.

—From an MAA announcement

Prizes of the Canadian Mathematical Society

The Canadian Mathematical Society (CMS) has announced the awarding of several major prizes.

RICHARD NOWAKOWSKI of Dalhousie University has been awarded the Adrien Pouliot Award for 2007. The award recognizes individuals or teams of individuals who have made significant and sustained contributions to mathematics education in Canada. According to the prize citation, Nowakowski was honored for "his long-term involvement with and leadership of the Canadian Mathematical Olympiad (CMO) and the International Mathematical Olympiad (IMO)." He has been "instrumental in establishing the Nova Scotia Math League (a set of mathematics problem-solving competitions) and the Math Circles (a series of activities to foster interest in mathematics among talented high-school students)," programs that have greatly increased schoolchildren's interest in mathematics.

LAP CHI LAU of the Chinese University of Hong Kong has been honored with the 2007 CMS Doctoral Prize. According to the prize citation, as a graduate student at the University of Toronto, he "wrote a groundbreaking dissertation which attacks fundamental and difficult problems concerning connectivity in graphs." The Doctoral Prize recognizes outstanding performance by a doctoral student who graduated from a Canadian university in the preceding year (January 1st to December 31st). The prize carries a cash award of C$500.

BRIAN FORREST of the University of Waterloo was chosen to receive the Excellence in Teaching Prize. The prize citation recognizes his "contagious excitement and enthusiasm for teaching mathematics" and refers to him as "someone who stands out both as a lucid expositor and as a caring mentor." The award recognizes sustained and distinguished contributions in teaching at the postsecondary undergraduate level at a Canadian institution.

GRAHAM P. WRIGHT of the University of Ottawa has been honored with the 2007 Distinguished Service Award. This award is given annually in recognition of sustained and significant service to the CMS or the Canadian mathematical community. He has served as executive director of the CMS since 1979 and, according to the citation, "has profoundly influenced and shaped the Society. His skillful and dedicated service to the CMS has been a major factor in the dramatic growth and transformation of the Society."

—From a CMS announcement

Rosenthal Receives COPSS Award

JEFFREY S. ROSENTHAL of the University of Toronto has been chosen to receive the 2007 Presidents' Award of the Committee of Presidents of Statistical Societies (COPSS). The award is given annually to a statistician under the

age of forty in recognition of outstanding contributions to the profession.

According to the prize citation, Rosenthal was selected "for his fundamental contributions to probability theory, stochastic processes and MCMC algorithms with applications to statistics; for seminal contributions to the theoretical underpinnings of the convergence rates of MCMC algorithms; for his prolific record of collaboration, resulting in significant publications in economics, mathematical finance, artificial intelligence and survival analysis; and for outstanding mentoring and extraordinary skill at communicating some of the deeper ideas of our discipline through the media (print, radio, and TV) and through the publication of a general audience book on probability in real life which, less than two years after publication, is in its 6th printing."

—From a COPSS announcement

ONR Young Investigator Award

Three researchers whose work involves the mathematical sciences have been selected to receive Young Investigator Awards from the Office of Naval Research (ONR) in the 2007 ONR Young Investigators Program competition. Their names, affiliations, and the titles of their proposals follow.

RAVI RAMAMOORTHI, Columbia University, "Mathematical Models of Illumination and Reflectance for Image Understanding and Machine Vision"; TIM ROUGHGARDEN, Stanford University, "Design and Analysis of Resource Allocation Protocols for Large Communication Networks"; MASSIMO FRANCESCHETTI, University of California, San Diego, "From Physics to Information, a Unified Approach to Diversity in Wireless Communication".

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 US$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

2007 International Mathematical Olympiad

The 48th International Mathematical Olympiad (IMO) was held in Hanoi, Vietnam, July 19–31, 2007. The IMO is the preeminent mathematical competition for high-school-age students from around the world. This year 536 young mathematicians from 94 countries competed. The IMO consists of solving six extremely challenging mathematical problems in a nine-hour competition administered over two days.

The team from Russia finished first, with a total of 184 points and five gold medals; followed by China (181 points, four golds); Vietnam (168 points, three golds); and South Korea (168 points, two golds). The United States team finished fifth, with 155 points and two gold medals.

The U.S. team consisted of SHERRY GONG (Phillips Exeter Academy, Exeter, New Hampshire), ERIC LARSON (South Eugene High School, Eugene, Oregon), BRIAN LAWRENCE (Montgomery Blair High School, Silver Spring, Maryland), TEDRICK LEUNG (North Hollywood High School, North Hollywood, California), ARNAV TRIPATHY (East Chapel Hill High School, Chapel Hill, North Carolina), and ALEX ZHAI (University Laboratory High School, Urbana, Illinois). Gong and Zhai won gold medals; Larson, Lawrence, and Tripathy received silver medals; and Leung received a bronze medal.

The Mathematical Association of America sponsors the U.S. team through its American Mathematics Competitions program, with travel support provided by a grant from the Army Research Office. Training for the team at the University of Nebraska-Lincoln is aided by a grant from the Akamai Foundation. Additional support for the team is provided by the National Council of Teachers of Mathematics.

More information about the 48th International Mathematical Olympiad is available at `http://www.imo2007.edu.vn/`.

—Elaine Kehoe

U.S. High School Girls Compete at China Girls' Math Olympiad

The Mathematical Sciences Research Institute (MSRI) sent two teams of high school girls, one each from the eastern and western United States, to participate in the 2007 China Girls' Mathematical Olympiad, an international competition held in central China August 11–16, 2007. This is the first year in which teams from the United States have competed in the China Girls' Mathematical Olympiad.

Representing the United States were MARIANNA MAO of Fremont, California; WENDY MU of Saratoga, California; COLLEEN LEE of Palo Alto, California; PATRICIA LI of San Jose, California; SWAY CHEN of Lexington, Massachusetts; JENNIFER IGLESIAS of Aurora, Illinois; WENDY HOU of Tampa, Florida; and SHERRY GONG of Exeter, New Hampshire. The eight students were chosen from the ranks of

CMS Winter 2007 Meeting

December 8-10, Hilton Hotel
London, Ontario

Host: University of Western Ontario
Scientific Director: Dr. J.F. Jardine (Western)
Local Arrangements: Dr. David Riley (Western)

PRIZES

Coxeter-James Prize
Vinayak Vatsal University of British Columbia)
Doctoral Prize
Lap Chi Lau (Chinese University of Hong Kong)
Adrien Pouliot Prize
Richard Nowakowski (Dalhousie University)
G. de B. Robinson Award
to be announced

PLENARY LECTURERS

Erich Kaltofen (North Carolina State)
Mikhail Kapranov (Yale)
Giovanni Landi (Trieste)
Blaine Lawson (SUNY/Stony Brook)
Seth Lloyd (MIT)
Otmar Venjakob (Heidelberg)
Marcelo C. Borba (UNESP-São Paulo State University)

SESSIONS

Algebraic Combinatorics, Representations and Geometry
Algebraic Stacks
Algorithmic Challenges in Polynomial and Linear Algebra
Calculus of Variations in Physics, Geometry and Economics
Combinatorics & its Applications to Mathematical Physics
Complex Analytic Geometry
:rror Control Codes, Information Theory, Applied Cryptography
Graph Theory
History and Philosophy of Mathematics
Homotopy Theory
Iwasawa Theory
Mathematical Applications of Category Theory
Mathematical Imagination
Mathematics of Finance
Non-Commutative Geometry
Nonlinear Wave Equations and Applications
Quantum Information Theory in Quantum Gravity
Contributed Papers

www.cms.math.ca/Events/

the top female finalists in the 2006 USA Mathematical Olympiad. Coaches for the team were Melanie Matchett Wood, a graduate student at Princeton University and the first female to make the U.S. International Math Olympiad team; Zuming Feng of Phillips Exeter Academy, director of the Mathematical Olympiad Summer Program; and Alison Miller, a member of the USA International Math Olympiad team in 2004. Gong won a gold medal and tied for first place, with 114 points out of 120. Hou received a silver medal, and Mu, Li, and Mao received bronze medals.

The China Girls' Mathematical Olympiad was founded in 2002 as a regional competition for teams of female students from China and other eastern Asian countries, including Russia. This year China expanded the competition to countries from around the world, with the United States, Canada, South Africa, and Australia among the invitees.

—From an MSRI announcement

Monroe H. Martin, 1907–2007

Monroe H. Martin, professor emeritus at the University of Maryland, passed away on March 11, 2007, about a month after reaching the age of 100. When he turned 100 years old, the governor of Maryland signed a proclamation paying tribute to Martin. The text of the proclamation reads as follows:

"Whereas, Maryland recognizes Monroe H. Martin for his extraordinary contributions as an assistant professor of mathematics commencing in 1936, tenured full professor commencing in 1942, Chair of the Mathematics Department commencing in 1943, member of the University Senate where he was the chief architect of the University's first statement on procedures for appointments and promotions; and

"Whereas, in acknowledgement of his serving as chair of the 1969–70 study on integration, which is widely acknowledged as opening greater educational opportunities for minorities at the University of Maryland; and

"Whereas, in tribute to his role as founding director of the Institute for Fluid Dynamics and Applied Mathematics in 1949, now known as the Institute for Physical Science and Technology which, by virtue of his energy, wisdom and insight brought together many of the University's—indeed the world's—most innovative thinkers in mathematics, physics, and other related disciplines; and

"Whereas, in gratitude for his endowing the Monroe H. Martin Professorship which will forever remind the University of a proud part of its history and will help the Institute for Physical Science and Technology thrive in the future as it has in its first 56 years.

"Now, therefore, I, Martin O'Malley, Governor of the State of Maryland, do join with all Marylanders in congratulating Professor Monroe H. Martin on the occasion of his 100th birthday."

—James Yorke, University of Maryland