Mathematics People

Vanneste Awarded Adams Prize

JACQUES VANNESTE of the University of Edinburgh has been awarded the 2010 Adams Prize by the University of Cambridge. The selected topic was fluid mechanics. According to the prize citation, Vanneste's work "spans fundamental issues underlying our understanding of geophysical fluid flow. He has brought an impressive array of modern asymptotic techniques to bear on differential equations modeling fluid flow. His work reveals a range of features which are of fundamental importance in both theoretical fluid dynamics and in applications of fluid dynamics to weather forecasting and climate modeling."

The Adams Prize is awarded each year jointly by the Faculty of Mathematics at the University of Cambridge and St. John's College to a young researcher based in the United Kingdom who is doing first-class international research in the mathematical sciences. The prize is named after the mathematician John Couch Adams and was endowed by members of St. John's College. It carries a cash prize of approximately £13,500 (about US$19,300), of which one-third is awarded to the prizewinner on announcement of the prize; one-third is provided to the prizewinner's institution (for research expenses of the prizewinner); and one-third is awarded to the prizewinner on acceptance for publication in an internationally recognized journal of a substantial (normally at least twenty-five printed pages) original survey article of which the prizewinner is an author.

—From a University of Cambridge announcement

Jordan Receives ACM Award

MICHAEL I. JORDAN of the University of California, Berkeley, has been awarded the 2009 Allen Newell Award of the Association for Computing Machinery (ACM). He was recognized "for fundamental advances in machine learning, particularly his groundbreaking work on graphical models and nonparametric Bayesian statistics, the broad application of this work across computer science, statistics, and the biological sciences". According to the prize citation, Jordan "has played a seminal role in the development of statistical machine learning. His work, and the work of his former students and postdocs, has served to define this area, which bridges computer science and statistics."

The Allen Newell Award is presented to an individual selected for career contributions that have breadth within computer science or that bridge computer science and other disciplines. This endowed award is accompanied by a prize of US$10,000 and is supported by the Association for the Advancement of Artificial Intelligence and by individual contributions.

—From an ACM announcement

Jackson Awarded Blackwell-Tapia Prize

TRACHETTE JACKSON of the University of Michigan, Ann Arbor, has been awarded the 2010 Blackwell-Tapia Prize. The prize recognizes a mathematical scientist who has contributed significantly to research in his or her field of expertise and who has served as a role model for mathematical scientists and students from underrepresented minority groups or has contributed in other significant ways to addressing the problem of the underrepresentation of minorities in mathematics.

Jackson received her Ph.D. in applied mathematics from the University of Washington in 1998. She works in applications of mathematics to the biomedical sciences. Her research focuses on the modeling of in vivo tumor vascularization and combines mathematical modeling, numerical simulation, and in vivo experimentation to gain deeper understanding of tumor growth and vascular development at the molecular, cellular, and tissue levels. She

has played a central role in the development of one of the first cell-based models of tumor-induced angiogenesis. She is cofounder and codirector of the Mathematical Biology Research Group at the University of Michigan.

The Blackwell-Tapia Prize is awarded every two years in honor of the legacy of David H. Blackwell and Richard A. Tapia, two distinguished mathematical scientists who have been inspirations to more than a generation of African American, Latino/Latina, and Native American students and professionals in the mathematical sciences.

—From a University of Michigan announcement

Mathematical Society of Japan Prizes

The Mathematical Society of Japan (MSJ) has awarded several prizes in the spring of 2010.

Osamu Iyama of Nagoya University has been awarded the 2010 Spring Prize. According to the prize citation, Iyama was honored "for his original and influential contribution to representations of finite dimensional algebras and Cohen-Macaulay modules. He has introduced and developed a higher theory of Auslander-Reiten sequences and found a higher dimensional analog of Auslander correspondence. He proved the finiteness of representation dimensions of Artin algebras, and solved Solomon's second conjecture on zeta functions of orders. He also gave a sequence of important works on cluster tilting subcategories in Calabi-Yau categories and their mutations, which provides a great influence not only in the representation theory but also in other branches of mathematics and physics." The Spring Prize is awarded to a member of MSJ under the age of forty who has made outstanding contributions to mathematics in the highest and broadest sense.

The MSJ has inaugurated a new prize in 2010, the JMSJ Outstanding Paper Prize, which is awarded to the authors of the most outstanding articles published in the *Journal of the Mathematical Society of Japan* (JMSJ) in the previous year. The 2010 awardees are Shigeaki Koike and Andrzej Swiech for their joint paper "Weak Harnack inequality for fully nonlinear uniformly elliptic PDE with unbounded ingredients", *JMSJ* **61**, No. 3 (2009), pp. 723–755, and Ken'ichi Ohshika for his article "Constructing geometrically infinite groups on boundaries of deformation spaces", *JMSJ* **61**, No. 4 (2009), pp. 1261–1291.

Nobuo Tsuzuki of Tohoku University and Hiroaki Terao of Hokkaido University have been awarded the 2010 Algebra Prize. Tsuzuki was honored for his "fundamental and outstanding contribution to the theory of p-adic cohomology and p-adic differential equations, a most important subject of present arithmetic geometry over a field of positive characteristic". Terao was selected for his "fundamental and outstanding contribution to the algebraic and geometric theory of hyperplane arrangements, connecting various branches of modern mathematics, including algebraic geometry, topology, Lie groups, etc."

Three Publication Prizes were awarded for 2010. The recipients are: Kazuo Muroi for *An Introduction to Babylonian Mathematics* (in Japanese), published by University of Tokyo Press; NHK (Japan Broadcasting Corporation) production staff, directed by Masahito Kasuga, for the NHK special *The Spell of Poincaré Conjecture*, and Tohoku University for the Tohoku University Wasan Portal, `http://www2.library.tohoku.ac.jp/wasan/`. Wasan is the Japanese-style mathematics that was developed in the seventeenth through nineteenth centuries.

—From a Math Society of Japan announcement

USA Mathematical Olympiad

The 2010 USA Mathematical Olympiad (USAMO) was held April 27–28, 2010. The students who participated in the Olympiad were selected on the basis of their performances on the American High School and American Invitational Mathematics Examinations. This year, 329 high school students qualified for the 2010 USA Mathematical Olympiad (USAMO). The twelve highest scorers in the USAMO, listed in alphabetical order, were: Timothy Chu, San Jose, California; Calvin Deng, Cary, North Carolina; Michael Druggan, Lexington, Kentucky; Brian Hamrick, Annandale, Virginia; Travis Hance, West Chester, Ohio; Xiaoyu He, Acton, Massachusetts; Mitchell Lee, Annandale, Virginia; In Sung Na, Old Tappan, New Jersey; Evan O'Dorney, Danville, California; Toan Duc Phan, Watertown, Connecticut; Hunter Spink, Calgary, Alberta, Canada; Allen Yuan, Farmington, Michigan.

In June the twelve USAMO winners will take the team selection test to qualify for the U.S. team. The six students with the highest combined scores from the test and the USAMO will attend the Mathematical Olympiad Summer Program (MOSP) at the University of Nebraska, Lincoln, training to compete in the International Mathematical Olympiad (IMO) to be held in Astana, Kazakhstan, July 2–14, 2010.

—Elaine Kehoe

Moody's Mega Math Challenge Winners Announced

The winners of the 2010 Mega Math Challenge for high school students have been announced. The topic for this year's competition was "Making Sense of the 2010 Census: To Count or Not to Count, That Is the Question". A team from Montgomery Blair High School in Silver Spring, Maryland, was awarded the Summa Cum Laude Team Prize of US$20,000 in scholarship money. The members of the team were Andrew Das Sarma, Jacob Hurwitz, David Tolnay, and Scott Yu. Their coach was David Stein.

The Magna Cum Laude Team Prize of US$15,000 was awarded to a team from High Technology High School in Lincroft, New Jersey. The members of the team were Sidney Buchbinder, Christian Gennaro, Joshua Ma,

ALEXANDER PAVINCIC, and MATTHEW WARSHAUER. Their coach was Raymond Eng.

The Cum Laude Team Prize of US$10,000 was awarded to a team from Maggie Walker Governor's School in Richmond, Virginia. The team members were SUSAN BALLENTINE, WILLIAM FARMER, ASHISH MAKADIA, CODY TALMADGE, and MILTON TYLER IV. Their coach was Kristine Chiodo.

A team from the Academy for the Advancement of Science and Technology in Hackensack, New Jersey, won the Meritorious Team Prize of US$7,500. The team members were JARED LANDSMAN, IAN OSBORN, PAVEL PANCHEKHA, MARK VELEDNITSKY, and SHERRY WU. Their coach was Ken Mayers.

The Exemplary Team Prize of US$5,000 was awarded to a team from Princeton High School, Princeton, New Jersey. The team members were ADA CHEN, KATHERINE LI, SHYAM MODI, JOHN WU, and KATIE ZHANG. They were coached by Lisa Krueger.

The First Honorable Mention Team Prize of US$2,500 went to a team from Immaculata High School in Somerville, New Jersey. The team members were JAMES DANCO, MARY HIGGINS, BRIAN KUTSOP, JOHN OSMOND, and PETER STADTMUELLER. They were coached by Elaine Petsu.

The Mega Math Challenge invites teams of high school juniors and seniors to solve an open-ended, realistic, challenging modeling problem focused on real-world issues. The top five teams receive awards ranging from US$5,000 to US$20,000 in scholarship money. The competition is sponsored by the Moody's Foundation, a charitable foundation established by Moody's Corporation, and organized by the Society for Industrial and Applied Mathematics (SIAM).

—From a Moody's Foundation/SIAM announcement

National Academy of Sciences Elections

The National Academy of Sciences (NAS) has announced the election of seventy-two new members and eighteen foreign associates. The new members who work in the mathematical sciences are JEROME H. FRIEDMAN, Stanford University; MICHAEL J. HOPKINS, Harvard University; MICHAEL I. JORDAN, University of California, Berkeley; DONALD B. RUBIN, Harvard University; THOMAS C. SPENCER, Institute for Advanced Study, Princeton; and ENDRE SZEMEREDI, Rutgers University. Elected as foreign associates were DAVID ALDOUS, University of California, Berkeley (United Kingdom); STANISLAS DEHAENE, National Institute of Health and Medical Research, Paris (France); and CONJEEVERAM S. SESHADRI, Chennai Mathematical Institute (India).

—From an NAS announcement

Pantula Appointed DMS Director

SASTRY G. PANTULA of North Carolina State University has been appointed director of the Division of Mathematical Sciences (DMS) in the Mathematical and Physical Sciences (MPS) directorate of the National Science Foundation (NSF), effective September 13, 2010. He will replace Peter March, who has been the director for the past four years. Pantula received his bachelor's and master's degrees, both in statistics, from the Indian Statistical Institute and his Ph.D. from Iowa State University in 1982. He is the current president of the American Statistical Association (ASA) and has received a number of awards for excellent teaching. His areas of interest include time series analysis and linear and nonlinear models. His research ranges from applications of statistical methods to derivation of asymptotic theory.

—From an NSF announcement