Mathematics People

Vogelius Named MPS Director

MICHAEL VOGELIUS of Rutgers, the State University of New Jersey, has been named Division Director of the Mathematics and Physical Sciences (MPS) directorate of the National Science Foundation (NSF). He will assume the position in January 2014.

Vogelius earned his Ph.D. in mathematics from the University of Maryland, College Park, in 1980. He has served on the faculty of the University of Maryland and has held visiting appointments at Stanford University, Ecole Polytechnique Federale de Lausanne, and the University of Copenhagen. He has been on the Rutgers faculty since 1989 and served as the department chair from 2009–2013. He has published more than ninety articles and is a Fellow of the American Mathematical Society, a Foreign Member of the Royal Danish Academy of Sciences and Letters, and a recipient of a Sloan Research Fellowship. He is an associate editor of the *SIAM Journal on Mathematical Analysis* and serves on the editorial boards of several other mathematical journals. His research interests include mathematical analysis, partial differential equations, and numerical analysis.

—From an NSF announcement

Vélez Receives AWM Humphreys Award

WILLIAM Y. VÉLEZ of the University of Arizona has been named the recipient of the fourth annual M. Gweneth Humphreys Award of the Association for Women in Mathematics (AWM).

The prize citation reads in part: "Vélez is legendary for his ability to encourage women to study mathematics and pursue mathematical careers. Particularly impressive is his success in instilling confidence in first-generation and minority students who are often struggling to overcome expectations based on culture and gender."

In 1988 he cofounded the Minority Calculus Advising Program at the University of Arizona, through which he encouraged students to continue taking mathematics courses. In 1997 he received a President's Award for Excellence in Science, Mathematics, and Engineering Mentoring.

The Humphreys Award is given annually to a mathematics teacher, female or male, who has encouraged female undergraduate students to pursue mathematical careers and/or the study of mathematics at the graduate level.

—From an AWM announcement

Beckmann Receives Louise Hay Award

SYBILLA BECKMANN of the University of Georgia has been named the recipient of the 2014 Louise Hay Award of the Association for Women in Mathematics (AWM). The award recognizes outstanding achievements in any area of mathematics education.

According to the prize citation, Beckmann was recognized for "her vision, persistence, and leadership in enhancing the teaching and learning of mathematics in this country and beyond. Her work is based on her insight that sustainable improvement in mathematics education can only occur when the mathematical culture in the schools and the universities is 'built on respect for the innate mathematical abilities that are the birthright of every student.' She has worked to energize every link of this chain, from the daily challenges that teachers face in their classrooms to the highest levels of the national discussions of K–12 education."

Beckmann received her Ph.D. in mathematics from the University of Pennsylvania and taught at Yale University before moving to the University of Georgia in 1988. She also spent a year teaching sixth grade and has written a textbook, *Mathematics for Elementary Teachers*. She created and directs the Mathematicians Educating Future Teachers program, funded by a Vertical Integration of Research and Education (VIGRE) grant from the National Science Foundation. She was one of the writers of the National Council for Teachers of Mathematics (NCTM) "Curriculum Focal Points for Pre-Kindergarten through Grade Eight" and two supplemental books and played a significant role in writing the Common Core State Standards in Mathematics. Her awards for teaching include the General Sandy Beaver Teaching Professorship of the College of Arts and Sciences at the University of Georgia; the Josiah Meigs Distinguished Teaching Professorship, the highest teaching honor at the University of Georgia; and the Regents' Teaching Award from the University System of Georgia. Her research interests include arithmetic geometry and algebraic number theory and Galois theory, as well as the mathematical education of teachers.

—From an AWM announcement

2013 International Mathematical Olympiad

More than five hundred young mathematicians from ninety-seven countries competed in the fifty-fourth International

Mathematical Olympiad (IMO), which was held in July 2013 in Santa Marta, Colombia. The IMO is the preeminent mathematical competition for high-school-age students from around the world. The IMO consists of solving six extremely challenging mathematical problems in a nine-hour competition administered over two days.

The team from the People's Republic of China finished first. The team from the Republic of Korea (South Korea) finished second, and the United States team finished third. Four members of the U.S. team won gold medals. In alphabetical order, the gold medal winners for the United States were: MARK SELKE, William Henry Harrison High School, Evansville, Indiana; BOBBY SHEN, Dulles High School, Sugar Land, Texas; JAMES TAO, Illinois Mathematics and Science Academy, Aurora, Illinois; and VICTOR WANG, Ladue Horton Watkins High School, St. Louis, Missouri. The silver medal recipients were RAY LI, Phillips Exeter Academy, Exeter, New Hampshire; and THOMAS SWAYZE, Canyon Crest Academy, San Diego, California. Shen and Swayze were gold medalists in the 2012 competition. The 2014 IMO will be held in Cape Town, South Africa, July 3–13, 2014.

—From an IMO announcement

Ford Foundation Fellowships Awarded

Three young mathematicians have been awarded National Research Council-Ford Foundation fellowships for 2013. MICHAEL L. JEMISON of Princeton University and MICHAEL SANTANA of the University of Illinois–Urbana-Champaign received predoctoral fellowships. ARNULFO PEREZ of Indiana University was awarded a dissertation fellowship.

—From a Ford Foundation announcement

Pi Mu Epsilon Student Paper Presentation Awards

Pi Mu Epsilon (PME), the U.S. honorary mathematics society, makes annual awards to recognize the best papers by undergraduate students presented at a PME student paper session. This year PME held a session in conjunction with the Mathematical Association of America Math-Fest held July 31–August 3 in Hartford, Connecticut. The AMS and the American Statistical Association sponsor awards to student speakers for excellence in exposition and research. Each awardee receives a check for US$150. The names, chapters, institutions, and paper titles of the award-winning students follow.

CAMRON BAGHERI, Ohio Xi Chapter, Youngstown State University, "Applications of linear algebra to the Fibonacci sequence"; MICHAEL BAKER, Ohio Xi Chapter, Youngstown State University, "A study of optical gain in three-component multilayered films"; MATTHEW BARRY, Texas Eta Chapter, Texas A&M University, "MathLex: A Web-based mathematical entry system"; LISA BORUM, Virginia Iota Chapter, Randolph-Macon College, "Pebbling chessboard and samurai Sudoku graphs"; JOSHUA BRAKENSIEK, Virginia Iota Chapter, home schooled, "Bounds on MSNs accepting directed trees"; CALVIN COCHRAN, Arkansas Beta Chapter, Hendrix College, "Shuffle posets and their Hasse diagrams"; KIM DO, Ohio Xi Chapter, Youngstown State University, "Introduction to combinatorial game theory and what lies underneath"; KARENNA GENZLINGER, Pennsylvania Alpha Alpha Chapter, Gettysburg College, "Minimum sumset size"; ALEX LEITHEISER, Wisconsin Delta Chapter, St. Norbert College, "On the atomisticity of supercharacter lattices of cyclic groups"; ASHLEY ORR, Ohio Xi Chapter, Youngstown State University, "Fourier and wavelet analysis: Extracting the business cycle"; DANIEL PERSIA, Ohio Iota Chapter, Denison University, "Modeling NBA player value from box score data"; SARAH RITCHEY, Ohio Xi Chapter, Youngstown State University, "Residue number system overflow detection algorithms for signed numbers"; ERIC SHEHADI, Ohio Xi Chapter, Youngstown State University, "Prioritizing vacant residential properties for demolition in Youngstown"; and LAURA STAVER, Wisconsin Delta Chapter, St. Norbert College, "Zero forcing for lattices".

—From a Pi Mu Epsilon announcement

Craig Appointed Director of the Fields Institute

WALTER CRAIG of McMaster University has been appointed director of the Fields Institute for Research in Mathematical Sciences. He received his Ph.D. from the Courant Institute of Mathematical Sciences in 1981 and has held positions at the California Institute of Technology, Stanford University, and Brown University. His research interests include partial differential equations, Hamiltonian dynamical systems, and their applications to the physical sciences. He is a fellow of the Royal Society of Canada, the American Association for the Advancement of Science, and the American Mathematical Society, as well as of the Fields Institute.

—From a Fields Institute announcement

Correction

Correction to the article "Voevodsky's univalence axiom in homotopy type theory" by S. Awodey, A. Pelayo, and M. Warren in the October 2013 issue: A misprint was introduced in press in the third footnote on page 1, where it should have read that M. Warren was a member of the School of Mathematics at the IAS from 2011 to 2013.

—Álvaro Pelayo