

MAA Prizes Presented in New Orleans

At the Joint Mathematics Meetings in New Orleans in January 2007, the Mathematical Association of America presented several prizes.

Gung and Hu Award for Distinguished Service

The Yueh-Gin Gung and Dr. Charles Y. Hu Award for Distinguished Service to Mathematics is the most prestigious award made by the MAA. It honors distinguished contributions to mathematics and mathematical education, in one particular aspect or many, and in a short period or over a career.

LEE LORCH of York University in Canada received the 2007 Gung and Hu Award for “for his life-long contributions to mathematics, his continued dedication to inclusiveness, equity, and human rights for mathematicians, and especially his profound influence on the lives of minority and women mathematicians who have benefited from his efforts.” A remarkable teacher and mentor, Lorch inspired many to enter mathematical careers who otherwise might not have considered such a path. “He has been throughout his career a vocal advocate and energetic worker for human rights and educational opportunities,” the award citation states. “His interventions, especially in the 1950s, led to changes in the policies and practices of the AMS and the MAA that ensured that all mathematicians could participate in the official events of these organizations.” Lorch was summoned before the House Committee on Un-American Activities and cited for contempt for refusing to say whether he had ever been a member of the Communist Party. He was dismissed from positions in the southern United States for his political activities; later, two institutions that had dismissed him awarded him honorary degrees. In his written response to the prize, Lorch raised pointed questions about the devastation that hit New Orleans as a result of Hurricane Katrina and the continued suffering of the city’s inhabitants. “Even the AMS homepage tells us only of Tulane—not of the several afflicted [historically black colleges and universities],” he wrote. “Perhaps no one in these institutions has submitted a report. Maybe they do not feel really part of the mathematical community. Why not? What is being done about it?” During the prize session, Lorch was greeted with a standing ovation by the meeting participants.

Haimo Awards for Teaching

The Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching were established in 1991. These awards honor college or university teachers who have been widely recognized as extraordinarily successful and whose teaching effectiveness has been shown to have had influence beyond their own institutions.

The 2007 Haimo Awards were presented to JENNIFER QUINN, MICHAEL STARBIRD, and GILBERT STRANG.

The award citation for Jennifer Quinn states: “Jennifer Quinn has a contagious enthusiasm that draws students to mathematics. The joy she takes in all things mathematical is reflected in her classes, her presentations, her publications, her videos, and her on-line materials. Her class assignments often include nonstandard activities, such as creating time line entries for historic math events, or acting out scenes from the book *Proofs and Refutations*.” In her thirteen years at Occidental College, she developed new courses with innovative teaching methods, including a history of mathematics course that led to a mathematics “game show” called “The Number Years”, which was a huge hit at the Joint Mathematics Meetings in 2000. Quinn is a co-editor of the magazine *Math Horizons* and co-author with Arthur Benjamin of the book *Proofs That Really Count: The Art of Combinatorial Proof*, which won the MAA’s Beckenbach Book Prize. Today Quinn is the executive director of the Association for Women in Mathematics and teaches occasionally at the University of Puget Sound and Pacific Lutheran University in Washington state.

“Michael Starbird’s goal is to help his students unleash the creativity within them,” states the award citation for Starbird. “He doesn’t just teach them mathematics. He teaches them how to discover and appreciate mathematics for themselves.” In his thirty-two years of teaching at the University of Texas at Austin, Starbird has had a positive impact on thousands of students. His influence has also spread through his teaching videos that appear in the Great Courses series of the Teaching Company. Starbird has received about a dozen teaching awards. He wrote a textbook with co-author Edward Burger entitled *The Heart of Mathematics: An Invitation to Effective Thinking*, which is aimed at nonmathematics majors.

The book received the 2002 Robert W. Hamilton Book Award and has been adopted at over two hundred colleges and universities. The prize citation concludes that Starbird is “creative, articulate, indefatigable, and an eloquent communicator and promoter of mathematics.”

According to the award citation for Gilbert Strang, “[h]is approaches to teaching linear algebra and mathematics for engineers have changed the way we all approach these subjects.” Strang has taught for forty-four years at the Massachusetts Institute of Technology, where he pioneered a new way to teach linear algebra, embodied in his textbook *Linear Algebra and Its Applications* (1976). “This book sparked a revolution in the way linear algebra was taught and has influenced a multitude of books that have come out since then,” the award citation says. “Rather than utilizing a theorem-proof format, the book was written in a conversational tone and included many practical applications.” Every year since 1981 more than 300 students out of the MIT class of 1,000 have taken Strang’s course. Strang also rethought the teaching of mathematics for engineers, introducing a new course at MIT and writing a textbook based on it, *Introduction to Applied Mathematics*. MIT’s Graduate Student Council recognized this course by giving Strang a teaching award in 2003. Strang is also a prolific researcher and has supervised twenty Ph.D. and five master’s degree students. “Gil has a deep love of mathematics and a profound understanding of how mathematics is used in the sciences and engineering,” the award citation concludes. “He has applied these qualities to reshape the way we teach mathematics.”

Chauvenet Prize

The Chauvenet Prize recognizes a member of the MAA who has written an outstanding expository article. First awarded in 1925, the prize is named for William Chauvenet, who was a professor of mathematics at the United States Naval Academy.

The 2007 Chauvenet Prize was awarded to ANDREW J. SIMOSON for his article “The gravity of Hades” (*Mathematics Magazine*, Vol. 75, No. 5, December 2002, pp. 335–350).

Calling this paper both amusing and learned, the prize citation says: “The central question of this paper, ‘Is the acceleration due to gravity stronger or weaker as we descend into the Earth?’ relates to celestial mechanics. The author answers this question for several models of the Earth’s structure that have been proposed over the centuries. The article is accessible to undergraduates who have had multivariable calculus and who are familiar with Newton’s law of gravitational force, even for students who are not yet in tune with abstract mathematics.” Simoson wrote another article on this topic, “Falling down a hole through

the Earth” (*Mathematics Magazine*, Vol. 77, No. 4, June 2004, pp. 171–189) as well as a book, *Hesiod’s Anvil: Falling and Spinning through Heaven and Earth*, published by the MAA.

Beckenbach Book Prize

The Beckenbach Book Prize, presented since 1982, is awarded to an author of a distinguished, innovative book published by the MAA.

WILLIAM P. BERLINGHOFF and FERNANDO Q. GOUVÊA received the 2007 Beckenbach Book Prize for *Math through the Ages: A Gentle History for Teachers and Others* (MAA and Oxtan House Publishers, 2004). This book presents twenty-five short historical sketches of important topics in mathematics. The prize citation notes that the book has “the great advantage of being appealingly readable to a wide audience ranging from secondary school and liberal arts students through the mathematical community’s educators and practitioners.” The citation goes on to say: “The beautiful writing makes it difficult for a reader to put the book down, and it is inviting to jump from one historical sketch to another.”

Euler Book Prize

The Euler Book Prize is given to the author(s) of an outstanding book about mathematics. The prize was given for the first time in 2007 to commemorate the 300th anniversary of the birth of Leonhard Euler.

JOHN DERBYSHIRE received the 2007 Euler Prize for his book *Prime Obsession: Bernhard Riemann and the Greatest Unsolved Problem in Mathematics* (Joseph Henry Press, National Academies Press, 2003). “Mathematical sagas don’t get much better than this, the story of the Riemann Hypothesis, close to 150 years old and referred to by the author of this book as ‘the great white whale of mathematical research,’” the prize citation says. It continues: “[T]he book covers the rich history of the problem and conveys to the nonspecialist reader the reasons the problem is interesting and important, not only in mathematics but possibly in physics.”

Certificates of Meritorious Service

Each year the MAA presents Certificates of Meritorious Service for service at the national level or for service to a section of the MAA. Those honored in 2007 are: Florida Section: MARILYN REPSHER of Jacksonville University; Kansas Section: SISTER JO ANN FELLIN, Benedictine College; Michigan Section: JERROLD W. GROSSMAN, Oakland University; Northeastern Section: DONNA BEERS, Simmons College; Rocky Mountain Section: JANET HEINE BARNETT, Colorado State University, Pueblo; and Texas Section: STUART ANDERSON, Texas A&M University, Commerce.

—Alyn Jackson