

MAA Prizes Awarded in San Antonio

At the Joint Mathematics Meetings in San Antonio in January 2006, the Mathematical Association of America (MAA) 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. First given in 1990 the Gung and Hu Award is the successor to the Award for Distinguished Service to Mathematics, awarded since 1962, and has been made possible by the late Charles Y. Hu and his wife, Yueh-Gin Gung. It is worth noting that Hu was not a mathematician but a retired professor of geology. He had such strong feelings about the basic nature of mathematics and its importance in all human endeavors that he felt impelled to contribute generously to our discipline.

HYMAN BASS of the University of Michigan received the 2006 Gung and Hu Award for “invest[ing] vast energies over several decades to strengthen the mathematical community.” An outstanding researcher and former member of Bourbaki, Bass has made many contributions to the mathematical community. He is a member of the National Academy of Sciences and has served on many NAS committees, including the Mathematical Sciences Education Board, which he chaired. A past president of the AMS, he has served on many Society committees. He has been on the boards of trustees of the Institute for Advanced Study and the Mathematical Sciences Research Institute. In recent years, Bass has turned his attention to improving school mathematics. “Hyman Bass is playing a vital role in bringing the insights of a mathematician to mathematics educators and the insights of a

mathematics educator to mathematicians,” the citation states. “He is conducting carefully reasoned, incremental, foundational research in order that discussion of educational issues may one day be based on more rigorous scientific findings. His service to mathematics and its teaching and learning at all levels is truly remarkable.”

Haimo Awards for Teaching

The Deborah and Franklin Tepper Haimo Awards for Distinguished College or University Teaching of Mathematics 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. Deborah Tepper Haimo was president of the MAA during 1991–1992.

The 2005 Haimo Awards were presented to JACQUELINE DEWAR of Loyola Marymount University, KEITH STROYAN of the University of Iowa, and JUDY LEAVITT WALKER of the University of Nebraska at Lincoln.

The award citation for Jacqueline Dewar states, “In her 32 years at Loyola Marymount University, Jackie Dewar’s enthusiasm, extraordinary energy, and clarity of thought have left a deep imprint on students, colleagues, her campus, and a much larger mathematical community.” She profoundly influenced the mathematics curriculum at Loyola Marymount, helping to shape the biomathematics program, the mathematics program for prospective secondary school teachers, and the Master of Arts in Teaching program. Her freshman-level workshop course is credited with improving the retention of mathematics majors. Outside the Loyola Marymount campus, Dewar has been active with

in-service programs for teachers, and with the Expanding Your Horizons conferences for middle- and high-school girls. The citation recognized Dewar for “her passionate devotion to the art of teaching”.

“Keith Stroyan’s name is synonymous with innovation in the teaching of calculus,” the award citation states. “In more than 30 years of teaching at the University of Iowa, he has constantly sought ways in which to combine past knowledge with recent discoveries and technology, and to find the mental ‘hooks’ with students’ previous experiences, current interests, and future aspirations.” One of the keys to his success is his careful training of graduate and undergraduate assistants for his courses, in which he inculcates the assistants with good teaching practices. Long before calculus reform projects started receiving grants from the National Science Foundation, Stroyan pioneered the use of computer programs to help students grasp calculus concepts. Then, with several NSF grants, he developed materials to integrate computers into calculus teaching.

“Judy Walker cares deeply about her students,” the prize citation states. “Her students testify that her courses are among the most demanding they ever had, yet consistently praise her ability to guide the direction of a class through questions. Superb at explaining mathematics and communicating the joy of discovery, she is readily available outside of class for special problem sessions, and is in demand as a doctoral thesis advisor.” One of her major innovations at the University of Nebraska was creating a freshman honors seminar for nonmajors called “The Joy of Numbers: Search for the Big Primes”, which she also adapted to serve elementary and middle school teachers. In 1997, Walker and a colleague launched ALL GIRLS/ALL MATH, a program to encourage high-school girls to pursue mathematics. She also started the Nebraska Conference for Undergraduate Women in Mathematics, which over its first seven years attracted 800 participants. The citation praised her “dynamic leadership and passionate commitment to teaching mathematics”.

Beckenbach Book Prize

The Beckenbach Book Prize, presented since 1982, is named for the late Edwin Beckenbach, a longtime leader in the MAA publications program and a professor of mathematics at the University of California, Los Angeles. The prize is awarded to an author of a distinguished, innovative book published by the MAA.

ARTHUR BENJAMIN, professor of mathematics at Harvey Mudd College and JENNIFER QUINN, executive director of the Association for Women in Mathematics, received the 2006 Beckenbach Book Prize for their book *Proofs that Really Count: The Art of Combinatorial Proof*. “Few mathematicians are

immune to the limpid charms of a clever counting argument,” the prize citation states. The book by Benjamin and Quinn “will charm you over and over again. The authors claim that counting arguments make the most compelling, natural, and memorable proofs. It is hard to disagree with them after dipping into this lovely volume...*Proofs That Really Count* illustrates in a magical way the pervasiveness and power of counting techniques throughout mathematics. It is one of those rare books that will appeal to the mathematical professional and seduce the neophyte.”

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 2006 Chauvenet Prize was awarded to FLORIAN PFENDER and GÜNTER M. ZIEGLER, both of the Technische Universität Berlin, for their article “Kissing Numbers, Sphere Packings, and Some Unexpected Proofs” (*Notices*, September 2004, pages 873–883). According to the citation, this “lucid and beautifully illustrated paper” discusses the history and progress of three classical packing problems in various dimensions: the kissing number problem, the sphere packing problem, and the lattice packing problem. The immediate backdrop for this paper is Thomas Hales’s controversial solution in 1998 to Kepler’s Conjecture, which is the general sphere packing problem for dimension three. Pfender and Ziegler’s paper clarifies the differences among the problems while also shedding light on recent developments in the kissing number problem. The authors “strip away all but the essentials so that novices may appreciate the power and beauty of these new approaches to finding answers to the kissing number problem.”

Certificates of Meritorious Service

Each year the MAA presents Certificates of Meritorious Service to honor outstanding service to sections of the MAA. Those honored in 2006 are: KAY SOMERS of Moravian College, Eastern Pennsylvania-Delaware Section; CALVIN (CAL) VAN NIEWAAL of Coe College, Iowa Section; ALAN TUCKER of Stony Brook University, Metropolitan New York Section; IVY KNOSHAUG of Bemidji State University, North Central Section; MARJORIE ENNEKING of Portland State University, Pacific Northwest Section; and WILLIAM YSLAS VÉLEZ of the University of Arizona, Southwestern Section.

—From MAA announcements