

# Biographies of Candidates 2007

Biographical information about the candidates has been supplied and verified by the candidates.

Candidates have had the opportunity to make a statement of not more than 200 words (400 words for presidential candidates) on any subject matter without restriction and to list up to five of their research papers.

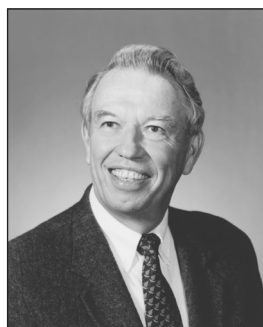
Candidates have had the opportunity to supply a photograph to accompany their biographical information.

Candidates with an asterisk (\*) beside their names were nominated in response to a petition.

Abbreviations: American Association for the Advancement of Science (AAAS); American Mathematical Society (AMS); American Statistical Association (ASA); Association for Computing Machinery (ACM); Association for Symbolic Logic (ASL); Association for Women in Mathematics (AWM); Canadian Mathematical Society, Société Mathématique du Canada (CMS); Conference Board of the Mathematical Sciences (CBMS); Institute for Advanced Study (IAS), Institute of Mathematical Statistics (IMS); International Mathematical Union (IMU); London Mathematical Society (LMS); Mathematical Association of America (MAA); Mathematical Sciences Research Institute (MSRI); National Academy of Sciences (NAS); National Academy of Sciences/National Research Council (NAS/NRC); National Aeronautics and Space Administration (NASA); National Council of Teachers of Mathematics (NCTM); National Science Foundation (NSF); Society for Industrial and Applied Mathematics (SIAM).

## President

### George E. Andrews



Evan Pugh Professor of Mathematics, Penn State University.

**Born:** December 4, 1938, Salem, Oregon, USA.

**Ph.D.:** University of Pennsylvania, 1964.

**AMS Committees:** Fellowship Policy, 1989; Library Committee, 1994–1997; History of Mathematics Editorial Board, 1996–2004 (Chair, 1996–2000); AMS-MAA Committee on Research in Undergraduate Mathematics Education, 1998–2001; AMS-MAA-SIAM Committee on Morgan Prize for Outstanding Research in Mathematics by an Undergraduate Student, 1998–2001; Editorial Boards Committee, 1999–2002; Contemporary Mathematics Editorial Board, 2005–2008.

**Selected Addresses:** CBMS Regional Conference, Arizona State University, 1985; Invited Address, American Association for the Advancement of Science, Annual Meeting, 1996; Invited Panelist, Teaching of First Year College-Level Mathematics, ICM, Berlin, 1998; Rademacher Lectures, University of Pennsylvania, 2003; Plenary Speaker, British Mathematics Colloquium, Birmingham, U.K., 2003.

**Additional Information:** Head, Penn State Mathematics Department, 1980–1982, 1995–1997; Guggenheim Fellowship, 1982–1983; Allegheny Region Distinguished Teaching Award (MAA), 1993; Member, American Acad-

emy of Arts and Sciences, 1997; Doctorate in Physics (hon.), Parma U. (Italy), 1998; University of Pennsylvania Centennial Award, 1999; D. Sc. (hon.), U. of Florida, 2002; Member, National Academy of Sciences, 2003; D. Math. (hon.), University of Waterloo (Can.), 2004; MAA Polya Lecturer, 2007–2009.

**Selected Publications:** 1. with R. J. Baxter and P. J. Forrester, Eight-vertex SOS model and generalized Rogers-Ramanujan-type identities, *J. Stat. Phys.* **35** (1989), 193–266. MR748075 (86a:82001); 2. with K. Ono and J. Jimenez Urroz, q-series identities and values of certain L-functions, *Duke Math. Journal* **108** (2001), no. 3, 395–419. MR1838657 (2002e:11055); 3. with K. Alladi and A. Berkovich, A new four parameter q-series identity and its partition implications, *Invention. Math.* **153** (2003), no. 2, 231–260. MR1992013 (2004g:05018); 4. Partitions with short sequences and mock theta functions, *Proc. Nat. Acad. Sci.* **102** (2005), No. 13, 4666–4671. MR2139704 (2006a:11131); 5. with Bruce Berndt, *Ramanujan's Lost Notebook, Part I*, Springer, New York, 2005. MR2135178 (2005m:11001).

**Statement:** Mathematics is the natural language of science and technology. The American Mathematical Society is the principal organization in the United States working to advance all aspects of mathematics. It is therefore a very great honor to be nominated for the presidency of the AMS. If elected, I will do everything in my power to aid the Society in contributing to the vitality of mathematics. However, it is clear that in the short span of two years, a President can hope to influence only a few important

matters in any significant way. Here are four issues of great concern to me:

**Funding Mathematical Research:** Historically, the NSF has played a major role in advancing mathematical research with individual investigator grants. Well-intentioned efforts to maintain grant size have necessarily led to fewer grants than might otherwise be possible. Canada's NSERC spreads its research funds widely by issuing small research grants. When I have served on NSF panels, I have always been saddened by the fact that many meritorious proposals were not supported because of insufficient funds. It appears to me that the Canadians do a better job with smaller grants making a wider impact. I would suggest presenting to the NSF the possibility of launching a pilot program patterned on the NSERC model.

**Pure vs. Applied:** The AMS has in the past supported a broad view of mathematics, and this needs continued emphasis in the future. In the light of current funding problems, pressures rise to narrow the scope of mathematical endeavors. This tends to reward primarily the currently successful, rather than spreading efforts to advance numerous branches of mathematics. Broad support for both pure and applied work is in the best interests of everyone. Who knows where the next major breakthroughs will emerge?

**Mathematics Education:** By a variety of measures, most of us are aware of the faltering of mathematics education in primary and secondary schools. The AMS should be in the forefront of promoting programs that assist current and future teachers in gaining the mathematical knowledge necessary for the mathematics they teach, and it should promote programs that assist in apprenticing future teachers to master teachers. In addition, a skeptical eye should be cast on a variety of technological or curricular reforms that promise a royal road to excellence. It is encouraging to note the new guidelines published by the National Council of Teachers of Mathematics; these delineate what students in the early grades need to know. Efforts of this nature should be supported by the AMS.

**AMS Fellows Program:** I support the decision of the AMS Council to reconsider the establishment of a Fellows Program, and concur with Ron Stern's essay in favor of the program in the August 2006 *Notices*. This program would be a useful mechanism for publicly recognizing the accomplishments of mathematicians, and help us to make the case for the importance of mathematics, particularly to administrators. I believe we should rethink the way in which Fellows would be selected in order to minimize the perception that the program would split the AMS into first and second class citizens. In particular, the original proposal has an "initial implementation" wherein any AMS member who had given either an AMS or ICM invited address or had been awarded an AMS prize would be invited to become a fellow. If this initial mechanism were made one of the permanent components of selection, then some of the concerns about domination by an elite should be mitigated.

**John W. Morgan**



Professor of Mathematics, Columbia University.

**Born:** March 21, 1946, Philadelphia, PA, USA.

**Ph.D.:** Rice University, 1969.

**AMS Committees:** Science Policy Committee, 1992–1995 (Chair, 1995); Chair, Committee to Select the Veblen Prize, 2001.

**Selected Addresses:** 45-minute address, International Congress, Berkeley, 1986; Invited Address,

Lambda-trees and their application, Joint Summer Meeting, 1990; Special Lecture on the Poincaré Conjecture, Joint Mathematics Meeting, 2005; International Congress, Madrid, Spain, 2006.

**Additional Information:** Member, Board of Trustees, MSRI, 1986–1994 (Chair, 1989–1994); Member, European Academy of Sciences; Member, Steering Committee of IAS/Park City Summer Institute in Mathematics, 1994–2000 and 2002–2007; Editor, *Journal of the AMS*, 2004–.

**Selected Publications:** 1. with Z. Szabó and C. Taubes, A product formula for the Seiberg-Witten invariants and the generalized Thom Conjecture, *J. Diff. Geom.*, **44** (1996) No. 4, 706–788. MR1438191 (97m:57052); 2. *Seiberg-Witten Equations and Applications to the Topology of Smooth Four-manifolds*, Lecture Notes in Mathematics, Princeton University Press, 1996. MR1367507 (97d:57042); 3. with R. Friedman and E. Witten, Vector bundles and F-theory, *Comm. Math. Phys.*, **187** (1997), No. 3, 679–743. MR1468319 (99g:14052); 4. with A. Borel and R. Friedman, Almost Commuting Elements in Compact Lie Groups, *Memoirs of the AMS*, **157** (2002), No. 747. MR1895253 (2003k:22006); 5. with Gang Tian, Ricci Flow and the Poincaré Conjecture, DG/0607607 (to appear in the Clay Mathematical Monographs).

**Statement:** The American Mathematical Society is the largest and most visible mathematics organization in the world. It is devoted to promoting mathematical research and the uses of this research, to strengthening mathematical education, and to fostering an awareness and appreciation of mathematics and its connections to the other sciences and to everyday life. It serves as the public face of mathematics. I would consider it a great honor to serve as the Society's president.

In many important respects, the state of mathematics has never been better. The research enterprise continues at a level of accomplishment and a scope of activity never before seen in history. Long-standing central problems in pure mathematics have been resolved. At the same time, the applications of mathematical research reach ever more areas of human endeavor—for example, biology and finance. Nevertheless, financial support for mathematics has been flat or declining (in real terms) for years. In addition, as mathematics becomes broader and more specialized, it is harder for its practitioners to understand what is being done outside their own specialties. It is even harder for the nonmathematician to have any appreciation of mathematical advances and their significance. The small

number of undergraduate mathematics majors, especially among traditionally under-represented groups, is also cause for concern.

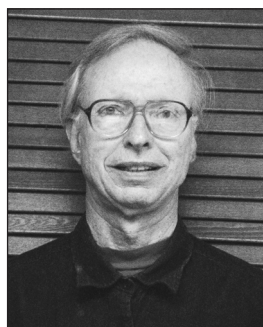
Communicating the nature and significance of mathematical work is in my view of utmost importance in addressing these issues. Communicating and collaborating across mathematical fields is essential to keeping our subject from disintegrating into specialized subdisciplines, uninformed by advances in other areas or by applications to areas outside mathematics. Communicating effectively the power and beauty of our subject to mathematics students and prospective mathematics students, and more generally to all students in our courses, whatever their primary intellectual interest, is essential to maintaining the flow of talented young people into the subject. Communicating our endeavors and successes and the significance of mathematics in modern life to the governmental funding agencies and Congress is essential if we expect to continue to receive their support. Finally, communicating the nature of our subject to nonmathematicians is crucial in the long term if we expect them to understand the role of mathematics in modern life and to believe in the practical effectiveness and the intellectual sweep of our subject.

As the experiences with both Fermat's Last Theorem and the Poincaré Conjecture demonstrate, there is a wide interest in the advances in even the purest areas of mathematics. There is, I believe, a receptive audience among the general public, among our undergraduate students, among other scientists, and among mathematicians themselves for stories about the major conjectures and advances in our subject—provided that these stories are told in a way that is accessible to them and that the stories reveal the power, scope, challenge and beauty of the subject.

If elected president of the Society, I will lead an effort to develop new ways and to enhance existing mechanisms to tell these stories, with the goal of increasing the understanding of the excitement and wonder of mathematics.

## Vice President

### Harold M. Stark



Professor, Department of Mathematics, University of California, San Diego.

**Born:** August 6, 1939, Los Angeles, California, USA.

**Ph.D.:** University of California at Berkeley, 1964.

**AMS Offices:** Nominating Committee, 1983–1985 (Chair, 1984–1985); AMS Council, 1988–1991; Editorial Boards Committee, 1995–1998 (Chair, 1996–1997).

**AMS Committees:** Committee to select hour speakers for Annual and Summer Meetings (reorganized as the Program Committee), 1975–1977; Committee to select summer institutes, 1976–1978 (Chair, 1978); Associate Editor, Research Announcements, AMS Bulletin, 1982–1988; Search Committee for new AMS Secretary, 1986; Committee to Select Cole Prize Winner, 1991–1993 (Chair, 1992).

**Selected Addresses:** Hour talk, Special session in number theory, Annual Meeting, Houston, 1967; 50-minute address, International Congress of Mathematicians, Nice, 1970; Invited address, MAA Annual Meeting, Las Vegas, 1972; Hour talk, Special session on the history of contemporary mathematics, Annual Meeting, 1981; Invited Address, Gauss-Dirichlet conference, Göttingen, 2005.

**Additional Information:** Elected to American Academy of Arts and Sciences, 1983; William Lowell Putnam Problem Committee, 1984–1987 (Chair, 1987); Board of Trustees, MSRI, 1990–1994; Chair, Department of Mathematics, UCSD, 1990–1994; University of California at Irvine Program Review Committee, 2007; Elected to the National Academy of Sciences, 2007.

**Selected Publications:** 1. A complete determination of the complex quadratic fields of class-number one, *Michigan Math. J.*, **14** (1967), 1–27. MR0222050 (36 #5102); 2. Some effective cases of the Brauer-Siegel theorem, *Inv. Math.*, **23** (1974), 135–152. MR0342472 (49 #7218); 3. Values of L-functions at  $s=1$  (IV), first derivatives at  $s=0$ , *Adv. Math.*, **35** (1980), 197–235. MR0563924 (81f:10054); 4. Galois theory, algebraic number theory and zeta functions, *From Number Theory to Physics*, Springer Verlag, Berlin, 1992, 313–393. MR1221105 (94d:11079); 5. with Audrey Terras, Zeta functions of finite graphs and coverings (II), *Adv. Math.*, **154** (2000), No. 1, 132–195. MR1780097 (2002f:11123).

**Statement:** In my 43 years in the profession, I have seen many changes within the AMS, the profession, and society in general. The all white male model for the faculty of a mathematics department that existed when I began is gone forever. The predominately white male model has not yet been vanquished. Salaries have gone up; housing prices have gone up even more. Mathematicians at the top are doing very well; those in academia at the bottom have temporary jobs teaching large lectures at outrageously low salaries with no benefits. I have seen talented men and women not get tenure and then hang on for years in temporary jobs before washing out. Can't we do better?

We cannot ignore the changes going on around us. In my opinion, high school students entering universities today are, on average, more poorly prepared for university mathematics courses than their predecessors of three and four decades ago. This is not the way things are supposed to be. Our government is not distinguished by its love or understanding of science. Besides its primary mission of advancing mathematical research, the AMS must continue to communicate the beauty and value of mathematics to the public and government.



**Bernd Sturmfels**



Professor of Mathematics and Computer Science, University of California at Berkeley.

**Born:** March 28, 1962, Kassel, Germany.

**Ph.D.'s:** University of Washington, Seattle, 1985 and Technische Universität Darmstadt, Germany, 1985.

**AMS Offices:** Member of the Council, JAMS representative, 2002–2004.

**AMS Committees:** Eastern Section Program Committee, 1994–1996; Journal of the AMS, Editorial Board, 1998–2004; Colloquium Lecture Committee, 2005–2008.

**Selected Addresses:** AMS Invited Address, San Antonio, TX, 1993; DMV Invited Address, German Mathematical Society, Mainz, 1999; CBMS Lectures on Solving Systems of Polynomial Equations, Texas A&M, 2002; Erdős Memorial Lecture, AMS-SMM Joint Meeting, Houston, TX, 2004; MAA-AMS Invited Address, Atlanta, GA, 2005.

**Additional Information:** Alfred Sloan Research Fellow, 1991–1993; National Young Investigator (NSF), 1992–1997; David and Lucile Packard Fellowship, 1992–1997; MAA Lester Ford Prize for Expository Writing, 1999; Miller Research Professor, UC Berkeley, 2000–2001; John von Neumann Professor, TU Munich, 2003; Hewlett-Packard Research Professor, MSRI Berkeley, 2003–2004; Clay Mathematics Institute Senior Scholar, 2004; MAA Polya Lecturer, 2005–2007; Board of Governors, IMA Minneapolis, 2005–2008; Alexander von Humboldt Senior Fellow, Berlin, Germany, 2007–2008.

**Selected Publications:** 1. with A. Björner, M. Las Vergnas, N. White and G. Ziegler, *Oriented Matroids*, Cambridge University Press, 1993. MR1744046 (2000j:52016); 2. *Gröbner Bases and Convex Polytopes*, AMS, University Lectures, No. 8, Providence, RI, 1996. MR1363949 (97b:13034); 3. with M. Saito and N. Takayama, *Gröbner Deformations of Hypergeometric Differential Equations*, Algorithms and Computation in Mathematics, No. 6, Springer, Heidelberg, 1999. MR1734566 (2001i:13036); 4. with E. Miller, *Combinatorial Commutative Algebra*, Graduate Texts in Mathematics, Springer Verlag, New York, 2004. MR2110098 (2006d:13001); 5. with L. Pachter, *Algebraic Statistics for Computational Biology*, Cambridge University Press, 2005. MR2205865 (2006i:92002).

**Statement:** The American Mathematical Society plays a fundamental role in supporting research mathematics and the community of mathematicians. It does this through its publications programs, meetings and conferences, employment services, and awarding of prizes and fellowships, and, more recently, through its initiatives in science policy and education. While I am fully dedicated to these important core missions, the following issues seem particularly important to me: 1. Programs aimed at supporting young mathematicians from diverse backgrounds. I have been fortunate to having worked with many extraordinary students and postdocs. The AMS has a special responsibility to attract the best talent to our profession,

and this includes women and minorities. 2. We need to be open-minded and confident about our own discipline. Mathematics is a key player in the bigger scientific landscape. My recent interactions with the life sciences led me to believe that the historic division into pure and applied mathematics needs to be re-examined. Emphasizing the unity of mathematics, and the important role it plays in the real world, will actually strengthen rather than undermine the intellectual core and intrinsic beauty of our field. 3. Collaboration with other scientific organizations and policy issues, domestically and internationally. I would like to help in fostering the international collaborations between the AMS and foreign organizations, such as the European Mathematical Society, and in coordinating the efforts by the AMS and other domestic groups (MAA, SIAM, AAAS, etc.) in representing the community of all mathematicians in the society at large.

**Trustee**

**Jean E. Taylor**



Visitor, Courant Institute of Mathematical Sciences, NYU, and Professor Emerita, Mathematics Department, Rutgers University.

**Ph.D.:** Princeton University, 1973.

**AMS Offices:** Member at Large of the Council, 1984–1988 (Executive Committee, 1986–1988); Vice President, 1994–1996; Trustee, 2003–2008.

**AMS Committees:** Nominating Committee, Program Committee

for National Meetings, Steele Prize Committee, Science Policy Committee, Committee on Meetings and Conferences, Committee on the Profession, and others.

**Selected Addresses:** AMS Invited Address, 1977; AMS-MAA Invited Address, 1989; MAA Hedrick Lectures, 1998; Plenary Lecturer, Mathematical Challenges Meeting, 2000; AWM Emmy Noether Lecturer, 2003; 16 AMS Special Sessions.

**Additional Information:** D. Sc. Honoris Causa, Mount Holyoke College; Alfred P. Sloan Foundation Fellow; Fellow of American Academy of Arts and Sciences, Association for Women in Science, and American Association for the Advancement of Science; Member at Large of Board and its Executive Committee, Black Rock Forest Consortium; Scientific Board, American Institute for Mathematics; Editorial Board of Interfaces and Free Boundaries, Experimental Mathematics. Past activities: President, AWM; Board of Directors, Program Committee, and Section A Chair, AAAS; Executive Committee, CBMS.

**Selected Publications:** 1. The structure of singularities in soap-bubble-like and soap-film-like minimal surfaces, *Ann. of Math. (2)*, **103** (1976), No. 3, 489–539. MR0428181 (55 #1208a); 2. with E. Bombieri, Which distributions of matter diffract? An initial investigation. International workshop on aperiodic crystals (Les Houches, 1986), *J. Physique*, **47** (1986), No. 7, C3-19–C3-28. MR0866320 (88a:52015); 3. Motion of curves by crystalline curvature, including triple junctions and boundary points, *Differential Geometry:*

*Partial Differential Equations on Manifolds*, Proc. Sympos. Pure Math., vol. 54, Part 1, Amer. Math. Soc., Providence, RI, 1993, pp. 417–438. MR1216599 (94c:53012); 4. Some mathematical challenges in materials science, *Bull. Amer. Math. Soc.*, 40 (2003) No. 1, 69–87. MR1943134 (2004h:74064).

**Statement:** I believe in the value of the AMS, and take very seriously (though not always in a serious manner) my responsibility as a Trustee for its financial health and the way it spends its money. Mathematics is in a kind of golden age with regard to public visibility and respect. Long may it last! We need to do our best to encourage this appreciation and use it to increase funding for research in all of mathematics. We need to address the continuing dearth of women in tenured positions in research universities; achieving tenure is the leakiest point in the leaky pipeline. In particular, we should continue to address the difficulties both men and women face in trying to manage career and family and personal health. We should continue fostering interdisciplinary as well as basic mathematics research. Finally, I believe that there are very serious ills in the world, high among them environmental issues such as global warming. Now that my kids are grown (all mathematicians!), I personally am heeding the call of John Holdren, President of AAAS, for scientists to give at least 10% of their time to such issues.

#### Karen Vogtmann



Professor of Mathematics, Cornell University.

**Born:** July 13, 1949, Pittsburg, California, USA.

**Ph. D.:** University of California, Berkeley, 1977.

**AMS Offices:** Vice President, 2003–2006.

**AMS Committees:** Fellowship Committee, 1989–1990 (Chair, 1990); Member at Large, Council, 1997–2000; Committee on Meetings and Conferences, 1997–2003 (Chair, 2000–2003);

Associate Editor, Research/Expository surveys, *Bulletin of the AMS*, 1998–2000; Executive Committee, 1999–2003; Committee on Education, 2003–2006.

**Selected Addresses:** Hour Address, AMS Annual Summer Meeting, Salt Lake City, UT, August, 1987; Lecture series, Program for Women in Mathematics, IAS, Princeton, NJ, May, 2005; 45-minute address, International Congress of Mathematicians, Madrid, Spain, August, 2006; AWM Nother Lecture, January, 2007; Minicourse, 20th Birthday Celebration of Outer Space, Luminy, France, February, 2007.

**Additional Information:** Member of European Mathematical Society and Association for Women in Mathematics.

**Selected Publications:** 1. with M. Culler, Moduli of graphs and automorphisms of free groups, *Invent. Math.*, 84 (1986), No. 1, 91–119. MR0830040 (87f:20048); 2. with A. Hatcher, Cerf theory for graphs, *J. London Math. Soc.*, 58 (1998), No. 3, 633–655. MR1678155 (2000e:20041); 3. with L. Billera and S. Holmes, Geometry of the space of

phylogenetic trees, *Advances in Applied Math*, 27 (2001), No. 4, 733–767. MR1867931 (2002k:05229); 4. with M. R. Bridson, The symmetries of outer space, *Duke Math. J.*, 106 (2001), No. 2, 391–409. MR1813435 (2001k:20084); 5. with Jim Conant, Infinitesimal operations on complexes of graphs, *Math. Ann.*, 327 (2003), No. 3, 545–573. MR2021029 (2004m:17026).

**Statement:** The current activities of the American Mathematical Society include the traditional ones of running well-organized meetings and conferences to facilitate mathematical interactions, disseminating and preserving mathematics through its publishing program, cooperating and working with other mathematical and scientific societies in the U.S. and abroad, and honoring outstanding contributions to the field by awarding prizes and sponsoring distinguished lecture series. More recent initiatives include promoting awareness of mathematics and mathematicians in Washington and by the general public, providing Internet tools for research in mathematics, helping to make mathematics literature readily available in every part of the world by supporting efforts to digitize the mathematics literature, actively encouraging the full participation of women and minorities in mathematics and supporting efforts to encourage young people to become seriously interested in mathematics through high school summer programs.

I fully support all of these activities, and believe that the American Mathematical Society is generally doing an excellent job with them. I have enjoyed my experience in various roles in the society leadership, which have included Council member, Executive Committee member, chair of the Committee on Meetings and Conferences, and vice president, and through them have developed a good overall sense of the functioning of the Society. I would be honored to serve now as a Trustee, and will work to ensure that the Society remains financially healthy, capable both of continuing its currently successful programs and of responding to new needs in the mathematics community as they arise.

#### Member at Large

##### José A. de la Peña



Professor of Mathematics, Instituto de Matemáticas, Universidad Nacional Autónoma de México.

**Born:** August 7, 1958, Monterrey, México.

**Ph.D.:** Universidad Nacional Autónoma de México, 1983.

**Selected Addresses:** Plenary Speaker, 2nd. Joint Meeting AMS-Sociedad Matemática Mexicana, Guanajuato, México, 1996; Plenary Speaker, Coloquio Latinoamericano de Algebra, Mendoza, Argentina, 2000; Plenary Speaker, Coloquio Latinoamericano de Algebra, Colonia, Uruguay, 2005; Invited Lecturer, Workshop on Representation Theory of Algebras, Torun, Poland, 2007.

**Additional Information:** President of the Mexican Mathematical Society, 1988–1990; Director of the Instituto de

Matemáticas, Universidad Nacional Autónoma de México, 1996–2004; President of the Mexican Academy of Sciences, 2002–2004; TWAS Award 2002 in Mathematics (given by the Third World Academy of Sciences), Trieste, Italy; National Award in Natural and Exact Sciences (México), 2005; Humboldt Award, Humboldt Foundation, Germany, 2006; Deputy Director for Science at the National Council for Science and Technology, 2007.

**Selected Publications:** 1. with R. Martínez, Automorphisms of representation finite algebras, *Invent. Math.*, **72** (1983), No. 3, 359–362. MR0704396 (84h:16018); 2. with P. Gabriel, Quotients of representation-finite algebras, *Comm. in Algebra*, **15** (1987), No. 1–2, 279–307. MR0876981 (88c:16025); 3. with H. Lenzing: Wild canonical algebras. *Math. Z.*, **224** (1997), No. 3, 403–425. MR1439198 (99a:16012); 4. with A. Skowronski, Geometric and homological characterizations of polynomial growth strongly simply connected algebras, *Invent. Math.*, **126** (1996), No. 2, 287–296. MR1411134 (97i:16007); 5. with D. Eisenbud, Chains of maps between indecomposable modules, *J. Reine Angew. Math.*, **504** (1998), 29–35. MR1656826 (2000a:16001).

**Statement:** Mathematics is a science with a deep impact in education, general knowledge, and other sciences. As a consequence, organized groups of mathematicians, such as the AMS, face many challenges: the development of stronger ties with teachers at all levels, with scientists in academic, industry and government positions and with people in the administration of science; the search for funding opportunities for mathematics; the need to attract more young students to mathematical careers; the search for employment opportunities for young researchers, among others. Working in Mexico, I have been concerned with these problems. I was responsible for the design of the Hall of Mathematics at the Museum of Sciences of the National University; at the Academy of Sciences, we developed a program for training school teachers to teach mathematics in attractive ways, among other actions. Collaboration among individuals and institutions of different countries is of fundamental importance for the development of mathematics around the world. Along the years, I have had a rich experience in research, collaboration with mathematicians of many countries, and supervising the Ph.D. work of students from Germany, Switzerland, Venezuela, Canada and China. In recent years, the Mexican and American communities have developed stronger institutional ties, for example through the organization of the AMS-SMM Joint Meetings. As a member of the Council, I would contribute to enhance actions between the AMS and the Mexican mathematical community.

**Robert W. Ghrist**



Associate Professor, Mathematics, University of Illinois, Urbana-Champaign; Research Faculty, UIUC Coordinated Science Laboratory; Research Faculty, UIUC Information Trust Institute.

**Born:** March, 1969, Euclid, Ohio, USA.

**Ph.D.:** Cornell University, Applied Mathematics, 1995.

**AMS Committees:** Committee on Committees, 2007–2009.

**Selected Addresses:** Journée de Rham, Lausanne, 2004; AMS Sectional Meeting, Invited Lecture, Evanston, 2004; National Science Foundation MPS Distinguished Lecture, Arlington, 2004; International Congress of Mathematicians, Dynamical Systems Session, Madrid, 2006; Joint Mathematics Meeting, Current Events Bulletin, New Orleans, 2007.

**Additional Information:** Excellence in Undergraduate Teaching Award, University of Texas, Austin, Mathematics Department, 1997; National Science Foundation CAREER awardee, 2002; National Science Foundation PECASE (Presidential Early Career Award for Scientists and Engineers) awardee, 2004; Lead Investigator, DARPA program “Sensor Topology and Minimal Planning”, 2006–; University Scholar, University of Illinois, Urbana-Champaign, 2007.

**Selected Publications:** 1. with P. Holmes and M. Sullivan, *Knots and Links in Three-Dimensional Flows*, Lecture Notes in Mathematics, Volume 1654, Springer-Verlag, 1997. MR1480169 (98i:58199); 2. with J. B. Van den Berg and R. C. Vandervorst, Morse theory on braids with applications to Lagrangian systems, *Invent. Math.*, **152** (2003), No. 2, 369–432. MR1974892 (2004e:37025); 3. with J. Etnyre, Generic hydrodynamic instability for curl eigenfields, *SIAM J. Applied Dynamical Systems*, **4** (2005), No. 2, 377–390. MR2173533 (2006e:37117); 4. with V. Peterson, The geometry and topology of reconfiguration, *Advances in Applied Mathematics*, **38** (2007), 302–323; 5. with V. de Silva, Homological sensor networks, *Notices Amer. Math. Soc.*, **54** (2007), No. 1, 10–17. MR2275921.

**Statement:** This is a golden age of mathematical research, in which elegance and depth are paired with a renewed commitment to fundamental impact outside of mathematics. We as mathematicians face the pleasant challenge of transferring the tools and ideas created daily to practitioners and theoreticians in neighboring fields of science, engineering, and more. I believe the AMS has an important role to play in promoting both the beauty and utility of our profession, and in assisting the mathematical community with finding creative opportunities for collaboration and funding of our research.



## Rebecca F. Goldin



Associate Professor, Mathematical Sciences, George Mason University.

**Born:** August 24, 1971, Philadelphia, PA, USA.

**Ph.D.:** Massachusetts Institute of Technology, 1999.

**Selected Addresses:** “Hypertoric varieties,” International Conference on Toric Topology, Osaka, Japan (2006); “Symplectic Geometry and Orbifolds,” University of

Florence, Italy (2006); “How to Use (and How Not to Use) Statistics in Reporting,” Institute for Humane Studies, Mini-workshop for Journalism Internship Program (2006); “Hypertoric varieties and their orbifold Cohomology,” Geometry Seminar, University of Maryland (2006); “Chen-Ruan Cohomology for global quotients by abelian Lie groups,” Workshop on Quantum Cohomology of Stacks, Institut Henri Poincaré (2007).

**Additional Information:** NSF Postdoctoral Fellowship, 1999–2002; NSF Disciplinary Grant in Geometric Analysis, 2003–2007; Currently the Director of Research at Statistical Assessment Service (STATS), a nonprofit media watchdog group affiliated with George Mason University. This work is supported by a Statistical Assessment Service Grant. 2004–current; NSF Disciplinary Grant in Geometric Analysis, 2006–2009; First recipient of the Ruth I. Michler Memorial Prize of the Association for Women in Mathematics (2007).

**Selected Publications:** 1. An effective algorithm for the cohomology ring of symplectic reductions, *Geom. Funct. Anal.*, **12** (2002), No. 3, 567–583. MR1924372 (2003m:53148); 2. with Tara Holm and Lisa Jeffrey, Distinguishing the chambers of the moment polytope, *Journal of Symplectic Geom.*, **2** (2003), No. 1, 109–131. MR2128390 (2005j:53093); 3. with A. L. Mare, Cohomology of symplectic reductions of generic coadjoint orbits, *Proc. Amer. Math. Soc.*, **132** (2004), No. 10, 3069–3074. MR2063128 (2005e:53134); 4. with Shaun Martin, Cohomology pairings on the symplectic reduction of products, *Canad. Math.*, **58** (2006), No. 2, 362–380. MR2209283; 5. with Tara Holm and Allen Knutson, Orbifold cohomology of torus quotients, *Duke Math. J.*, to appear.

**Statement:** The AMS plays a central role within the mathematical community, but it also plays a leadership role in publicizing the importance of mathematics for human progress. The contribution that mathematics makes to how people live and the decisions they make day to day is vastly underestimated, as is its impact on how the government makes laws and how society evolves. Many indicators have highlighted the importance of mathematical sophistication at a high level for an educated public and government, and yet we find ourselves with little ability to communicate the importance of our work to the public at large. As a Council member (and as Director of Research at STATS), I hope to work with the Society towards better funding for mathematics in higher education as well as for grades K–12, and lower tolerance for innumeracy. We

need more talented people to choose careers in teaching and research. We need the media to raise public standards by reporting with mathematical sophistication. Mathematicians can communicate the beauty and depth of abstract thinking while also acknowledging the importance of our work to the “real world” and selling it to non-mathematicians. As funding for research and for universities continues to be threatened, we need to vocalize the importance of mathematics and its discoveries. Basic progress depends on it.

## Helen G. Grundman



Professor of Mathematics, Department of Mathematics, Bryn Mawr College, Bryn Mawr, PA, USA.

**Born:** July 16, 1957, W. Reading, PA, USA.

**Ph.D.:** University of California, Berkeley, 1989.

**AMS Committees:** Ad-hoc Task Force on Employment, 1991–1992; Presidential Task Force on Membership, 1998–2000; Committee on Professional Ethics, 2004–2007.

**Selected Addresses:** AMS Special Session on Algebraic Geometry, Denton, TX, 1990; AMS Special Session on Modular Forms and Related Topics, San Antonio, TX, 1993; AMS Special Session on Modular Forms, Elliptic Curves, and Related Topics, Washington, DC, 2000; AMS Special Session on Modular Forms, Elliptic Curves, and Related Topics, Baltimore, MD, 2003; Maine-Quebec Number Theory Conference, Orono, Maine, 2003.

**Additional Information:** MIT C. L. E. Moore Instructor, 1989–1991; MSRI Postdoctoral Research Fellow, 1994–1995; Bunting Institute of Radcliffe College Science Fellow, 1998–1999; Fibonacci Association Board of Directors, 1998–2006; Council on Undergraduate Research, 1999–2002; NSF Division of Mathematical Sciences Program Director, 2001–2002; Member of AMS, AWM, Fibonacci Association.

**Selected Publications:** 1. The arithmetic genus of Hilbert modular varieties over non-Galois cubic fields, *J. Number Theory*, **37** (1991), No. 3, 343–365. MR1096448 (92d:11047); 2. with T. L. Smith, Automatic realizability of Galois groups of order 16, *Proc. Amer. Math. Soc.*, **124** (1996), No. 9, 2631–2640. MR1327017 (97f:12005); 3. with G. Stewart, Galois realizability of non-split group extensions of  $C_2$  by  $(C_2)^f \times (C_4)^s \times (D_4)^t$ , *J. Algebra*, **272** (2004), No. 2, 425–434. MR2028065 (2004j:12004); 4. with L. E. Lippincott, Computing the arithmetic genus of Hilbert modular fourfolds, *Math. Comp.*, **75** (2006), No. 255, 1553–1560. MR2219045 (2007b:11056); 5. Writing a Teaching Philosophy Statement, *Notices Amer. Math. Soc.*, **53** (2006), No. 11, 1329–1333.

**Statement:** The AMS serves many important roles in the support of mathematics research and education. It is crucial to the well-being of the profession that the AMS continues to promote mathematics, communicating its importance to employers both in and out of academia, to the government, to both governmental and

non-governmental funding agencies, and to the general public at large. At the same time, it needs to continue its part in enhancing mathematicians' abilities to conduct and disseminate their research through sponsoring conferences, publishing high-quality books and journals, and providing state-of-the-art services like MathSciNet. It also needs to continue working with other organizations to improve mathematics education at all levels. Of particular concern is that all talented students, including women, ethnic and economic minorities, and the disabled, are encouraged to pursue mathematics and that they have equal opportunities to learn and succeed. Coupled with this, of course, there must be continued efforts to increase available funding for mathematics graduate students and to expand the employment opportunities for recent mathematics Ph.D.'s. I am excited by the prospect of, if elected, working with others on the AMS Council on these and related issues.

**Bryna Kra**



Professor, Northwestern University.

**Born:** October 6, 1966, Boston, MA, USA.

**Ph.D.:** Stanford University, 1995.

**AMS Committees:** Selection of speakers for Current Events Bulletin, 2006; Associate Editor, Bulletin of AMS, 2006–.

**Selected Addresses:** Plenary Talk, Canadian Mathematical Society, Victoria, 2005; AMS Current Events

Session, Atlanta, 2005; Invited Address, International Congress of Mathematicians, Madrid, 2006; AMS Invited Address, Cincinnati, 2006; AMS-MAA Invited Address, New Orleans, 2007.

**Additional Information:** NSF-NATO Postdoctoral Fellow, 1998–1999; Co-organizer of “Harmonic Analysis, Ergodic Theory, and Probability,” Stanford, 2005; Co-organizer of AMS Special Session, 2006; AMS Centennial Fellow, 2006–2007; Co-organizer for semester program at MSRI, 2008.

**Selected Publications:** 1. with B. Host, Nonconventional ergodic averages and nilmanifolds, *Ann. of Math.*, **161** (2005), 397–488. MR2150389 (2007b:37004); 2. with B. Host, Convergence of polynomial ergodic averages, *Israel J. Math.*, **149** (2005), 1–19. MR2191208 (2007c:37004); 3. with V. Bergelson and B. Host, Multiple recurrence and nilsequences, *Invent. Math.*, **160** (2005), 261–303. MR2138068; 4. with N. Frantzikinakis, Ergodic averages for independent polynomials and applications, *J. Lond. Math. Soc.*, **74** (2006), 131–142. MR2254556 (2007e:37004); 5. The Green-Tao Theorem on arithmetic progressions in the primes: An ergodic point of view, *Bull. Amer. Math. Soc.*, **43** (2006), 3–23. MR2188173 (2006h:11113).

**Statement:** The AMS is the principal organization supporting research in mathematics in the United States and is the major advocate both for mathematics and for mathematicians. If elected to serve on the Council, I would try to improve federal and local support for mathematics, broaden

the constituency of the AMS by increasing membership among underrepresented groups, and seek creative solutions for communicating with the general public. Most importantly, I would advocate support for research at all levels of mathematics. I would also advocate policies that increase mentoring and support for mathematicians at all stages of their careers, including undergraduates, graduate students, postdocs, mathematicians working at primarily educational institutions, and early and mid-career mathematicians. The AMS must look to the future to serve and advocate for all its constituencies, while preserving the commitment to the highest standards and traditions of research mathematics.

**Fanghua Lin**



Professor of Mathematics, Courant Institute of Mathematical Sciences, New York University.

**Born:** March 11, 1959, Ningbo, Zhejiang Province, People's Republic of China.

**Ph.D.:** University of Minnesota, 1985.

**AMS Committees:** Centennial Fellowship Committee, 1999–2000.

**Selected Addresses:** AMS Eastern Sectional Meeting, 1988; International Congress of Mathematicians, 1990; Joint AMS-Hong Kong Mathematical Society Meeting, Hong Kong, 2000; AMS National Meeting, San Diego, 2002.

**Additional Information:** A. P. Sloan Fellowship, 1988; Presidential Young Investigator Award, 1989; AMS M. Bocher Prize, 2002; Fellow of American Academy of Arts and Sciences, 2004.

**Selected Publications:** 1. Complex Ginzburg-Landau equations and dynamics of vortices, filaments, and codimension-2 submanifolds, *Comm. Pure Appl. Math.*, **51** (1998), No. 4, 385–441. MR1491752 (98k:35177); 2. Gradient estimates and blow-up analysis for stationary harmonic maps, *Ann. of Math. (2)* **149** (1999), No. 3, 785–829. MR1709303 (2000j:58028); 3. with Tristan Rivière, Complex Ginzburg-Landau equations in high dimensions and codimension two area minimizing currents, *J. Eur. Math. Soc. (JEMS)*, **1** (1999), No. 3, 237–311. MR1714735 (2000g:49048); 4. with Fengbo Hang, Topology of Sobolev mappings II, *Acta Math.*, **191** (2003), No. 1, 55–107. MR2020419 (2005m:58023); 5. with Yisong Yang, Existence of energy minimizers as stable knotted solitons in the Faddeev model, *Comm. Math. Phys.*, **249** (2004), No. 2, 273–303. MR2080954 (2005g:58035).

**Statement:** The AMS is run by its members, and I, as many others, have greatly benefited from this society in my professional life. It is therefore a privilege as well as a duty to serve this organization. Mathematics and mathematicians are facing ever greater challenges in our high-tech era. On one hand, there is a fast growing of mathematical knowledge and volumes of publications. On the other hand, there is an increasing need for mathematical expertise and applications in emerging areas of the sciences and inter-disciplinary studies. The need for new breeds of



mathematical professionals who are able to meld both the pure and applied sciences is great. Needless to say, the cross-fertilization of ideas is vital for the integration and health of sciences and mathematics, and it is also a key for ensuring the position of mathematics as fundamental for all sciences and scientific progress.

We face at least two basic tasks: First, we need to attract and help many more young students to study mathematics and to pursue mathematical careers. We need to redefine part of our educational trainings. Second, we must have more interactions among the different branches of mathematics and also among the diverse scientific fields. We should encourage the development of widespread interdisciplinary research, communication, and interaction.

Since my own research has been in both pure mathematics and its applications, and since I have experience training and mentoring many excellent undergraduate, graduate students, and post-docs, I feel that I would be able to contribute to both of these tasks.

### M. Ram Murty



Professor and Queen's Research Chair, Queen's University.

**Born:** October 16, 1953, Guntur, India.

**Ph.D.:** Massachusetts Institute of Technology, 1980.

**Selected Addresses:** AMS Invited Address, University of California at Santa Barbara, 2000; The Royal Society of Canada Invited Address, 2001; Gerhard Herzberg Lecture, Carleton University, 2005; Tata

Institute for Fundamental Research Public Lecture, 2005; Coleman-Ellis Lecture, Queen's University, 2006.

**Additional Information:** Fellow, Institute for Advanced Study, 1980–1981, 1983, 1987, 1990, 1995, 2006; Fellow of the Royal Society (Canada), 1990; E. W. R. Steacie Fellow, 1991–1993; Ferran Sunyer Balaguer Prize, 1995; Killam Research Fellow, 1998–2000; Brown University Distinguished Visiting Professor, 1999; Associate Editor, Canadian Journal of Mathematics, 2002–2006; Associate Editor, Canadian Mathematical Bulletin, 2002–2006; Editorial Board, Acta Arithmetica, 2002–2007; Jeffery-Williams Prize, 2003; Vice-President (Ontario), Canadian Mathematical Society, 2004–2007; Fellow of The Fields Institute, 2004; Editorial Board, International Journal of Number Theory, 2005–2007; Adjunct Professor, McGill University, Harish-Chandra Research Institute, Institute for Mathematical Sciences, Chennai, India.

**Selected Publications:** 1. with R. Balasubramanian, An omega theorem for Ramanujan's function, *Invent. Math.*, **68** (1982), No. 2, 241–252. MR0666161 (84a:10023a); 2. with R. Gupta, A remark on Artin's conjecture, *Invent. Math.*, **78** (1984), No. 1, 127–130. MR0762358 (86d:11003); 3. with R. Gupta, Cyclicity and generation of points mod  $p$  on elliptic curves, *Invent. Math.*, **101** (1990), No. 1, 225–235. MR1055716 (91e:11065); 4. with V. Kumar Murty, Mean values of derivatives of modular L-series, *Ann. of Math. (2)*, **133** (1991), No. 3, 447–475.

MR1109350 (92e:11050); 5. Selberg's conjectures and Artin L-functions, *Bull. Amer. Math. Society*, **31** (1994) No. 1, 1–14. MR1242382 (94j:11116).

**Statement:** The primary objective of the AMS in disseminating mathematical knowledge and allowing for the interchange of ideas has a global dimension. In this context, the timely publications of current research and making these widely available at reasonable prices, to young researchers in all parts of the world, is an important task of the AMS that I would strongly support. In addition, mathematics is finding new applications in diverse branches of science and industry. Thus, I support the role of the AMS in this liaison and dialogue.

### Irena Peeva



Associate Professor, Cornell University.

**Born:** Sofia, Bulgaria.

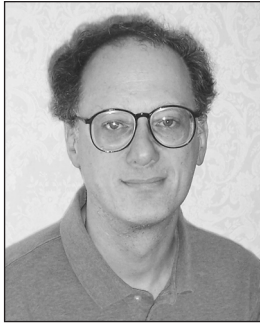
**Ph.D.:** Brandeis University, 1995.

**Additional Information:** Sloan Doctoral Dissertation Fellowship, 1994–1995; C. L. E. Moore Instructorship at MIT, 1995–1998; Sloan Research Fellowship, 1999–2001; NSF CAREER Grant, 2004–2009; (Co)organizer of 18 conferences in Commutative Algebra.

**Selected Publications:** 1. with L. Avramov and V. Gasharov, Complete intersection dimension, *Inst. Hautes Études Sci. Publ. Math.*, **86** (1997), 67–114. MR1608565 (99c:13033); 2. with V. Gasharov and V. Welker, The lcm-lattice, *Math. Res. Lett.*, **6** (1999), No. 5-6, 521–532. MR1739211 (2001e:13018); 3. with V. Gasharov, Deformations of codimension 2 toric varieties, *Compositio Math.*, **123** (2000), No. 2, 225–241. MR1794859 (2002f:13060); 4. with L. Avramov, Finite regularity and Koszul algebras, *Amer. J. Math.*, **123** (2001), No. 2, 275–281. MR1828224 (2002i:13012); 5. with M. Stillman, Connectedness of Hilbert schemes, *J. Algebraic Geom.*, **14** (2005), No. 2, 193–211. MR2123227 (2006a:14003).

**Statement:** If elected, I would work hard on the issues that come to the attention of the Council. I am particularly interested in issues related to 1) meetings and conferences, 2) employment opportunities for new and recent Ph.D.'s, 3) promoting diversity of both the mathematical research community and the students, 4) low-cost publication of high quality mathematics, 5) the future of the mathematical libraries.

**Joseph H. Silverman**



Professor of Mathematics, Brown University.

**Born:** March 27, 1955, New York, New York, USA.

**Ph.D.:** Harvard University, 1982.

**AMS Committees:** Conant Prize Selection Committee, 2000–2003; University Lecture Series Editorial Committee, 2006–2008.

**Selected Addresses:** MAA Invited Address, Joint Mathematics Meeting, Baltimore, 2003; Frontier Lecture Series, Texas A&M, 2005; Summer School on Computational Number Theory and Cryptography, Wyoming, 2006; Invited Lecture Series, NCTS National Tsing Hua University, Taiwan, 2006; Distinguished Lecturer, Oberlin, 2007.

Additional Information: NSF Post-Doctoral Fellow, MIT, 1983–1986; Sloan Foundation Fellow, 1987–1991; Compositio Mathematica Editorial Board, 1993–2005; MAA Lester Ford Award, 1994; AMS Steele Prize for Mathematical Exposition, 1998; Guggenheim Foundation Fellowship, 1998–1999; NSF Institute for Pure and Applied Mathematics (IPAM) Board of Trustees, 2003–2005; Co-organizer of AMS Special Sessions (Providence, 1999, New Jersey, 2004), IPAM workshops on cryptography (2002, 2006), AIM Workshop on Arithmetic Dynamics (2008).

**Additional Information:** NSF Post-Doctoral Fellow, MIT, 1983–1986; Sloan Foundation Fellow, 1987–1991; Compositio Mathematica Editorial Board, 1993–2005; MAA Lester Ford Award, 1994; AMS Steele Prize for Mathematical Exposition, 1998; Guggenheim Foundation Fellowship, 1998–1999; NSF Institute for Pure and Applied Mathematics (IPAM) Board of Trustees, 2003–2005; Co-organizer of AMS Special Sessions (Providence, 1999, New Jersey, 2004), IPAM workshops on cryptography (2002, 2006), AIM Workshop on Arithmetic Dynamics (2008).

**Selected Publications:** 1. *The Arithmetic of Elliptic Curves*, Graduate Texts in Mathematics **106**, Springer-Verlag, N.Y., 1986. MR0817210 (87g:11070); 2. with M. Hindry, The canonical height and integral points on elliptic curves, *Invent. Math.* **93** (1988), 419–450. MR0948108 (89k:11044); 3. with M. Rosen, On the rank of an elliptic surface, *Invent. Math.*, **133** (1998), 43–67. MR1626465 (99f:11081); 4. with M. Hindry, *Diophantine Geometry: An Introduction*, Graduate Texts in Mathematics **201**, Springer-Verlag, New York, 2000. MR1745599 (2001e:11058); 5. *The Arithmetic of Dynamical Systems*, Graduate Texts in Mathematics, Springer-Verlag, N.Y., 2007.

**Statement:** I have been actively involved for more than 25 years in mathematics research and mathematics education at the undergraduate and graduate levels, including the supervision of 18 Ph.D. students. My six textbooks and two edited conference proceedings, whose target audiences range from first-year students to advanced math majors to graduate students to research mathematicians, have given me a wide-ranging perspective on the varied requirements of and mathematical activities at colleges and universities around the country. There are many challenges currently facing the mathematical community that I hope to address as a member of the AMS Council. Among these I mention two in particular. First, we need to increase and regularize funding opportunities for young mathematicians as they progress on the long road from graduate student to tenured faculty member. Second, the mathematical publishing field faces many challenges including issues of electronic versus print, the spiraling cost of journals, and the importance of copyright protection versus the desirability of making resources widely and easily available via the Internet. I feel that the AMS, through its journal

and book publication activities, can play an active role in helping to resolve these issues.

**Sarah J. Witherspoon**



Associate Professor of Mathematics, Texas A&M University.

**Born:** October 5, 1966, Maryland, USA.

**Ph.D.:** University of Chicago, 1994.

**AMS Committees:** AMS-MAA-SIAM Joint Committee on Employment Opportunities, 2007–2009.

**Selected Addresses:** Colloque de Luminy, Methodes Homologiques et Representations de Groupes, France, 1997; MSRI Hopf Algebras Workshop, Berkeley, 1999; Lie Groups, Lie Algebras, and their Representations Workshop, University of California, Santa Cruz, 2004; Coloquio Latinoamericano de Algebra, Colonia, Uruguay, 2005; Bristol-Leicester-Oxford Algebra Colloquium, Oxford, U. K., 2006.

**Additional Information:** Co-organizer, AMS-IMS-SIAM Joint Summer Research Conference on Groups, Representations, and Cohomology, Mount Holyoke College, 2002; Alexander von Humboldt Foundation Research Fellow, 2005–2006; Co-organizer, Banff International Research Station Workshop on Hochschild Cohomology of Algebras, Canada, 2007.

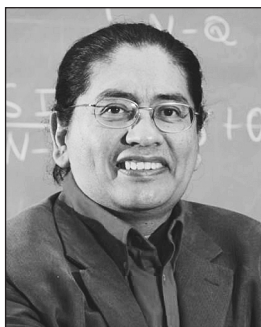
**Selected Publications:** 1. with M. S. Montgomery, Irreducible representations of crossed products, *J. Pure Appl. Algebra*, **129** (1998), No. 3, 315–326. MR1631261 (99d:16030); 2. with S. F. Siegel, The Hochschild cohomology ring of a group algebra, *Proc. London Math. Soc.* (3), **79** (1999), No. 1, 131–157. MR1687539 (2000b:16016); 3. with G. Benkart, A Hopf structure for down-up algebras, *Math. Z.*, **238** (2001), No. 3, 523–553. MR1869697 (2002k:16059); 4. Products in Hochschild cohomology and Grothendieck rings of group crossed products, *Adv. Math.*, **185** (2004), No. 1, 136–158. MR2058782 (2005j:16010); 5. with J. Pakianathan, Quillen stratification for Hochschild cohomology of blocks, *Trans. Amer. Math. Soc.*, **358** (2006), No. 7, 2897–2916. MR2216251 (2007b:20110).

**Statement:** The future of our profession depends on its youngest members and on its potential future members. It is crucial that we be engaged in efforts to improve mathematics education and awareness at all levels, and that we support young mathematicians in every way possible as they begin their careers. In particular, it is important to continue removing any obstacles, other than merit, in the paths of underrepresented groups on their way to becoming mathematicians. As a member of the AMS Council, I would work on these and the many other issues of importance to the society, including employment and funding opportunities, teacher training and outreach, journals and libraries.



## Nominating Committee

### Carlos Castillo-Chavez



University Regents and Joaquin Bustoz Jr. Professor, Arizona State University.

**Born:** March 29, 1952, Mexico.

**Ph.D.:** University of Wisconsin-Madison, 1984.

**AMS Committees:** Committee on Committees, 2005–2007.

**Selected Addresses:** Hispanic Heritage Month Key Note Speaker, The National Institutes of Health Hispanic Employee Organization

(NIH-HEO), September, 2004; Dr. Marjorie Lee Brown Colloquium Speaker, January, 2005; Key Note Speaker, 2005 World Conference on Natural Resource Modeling, Humboldt State University, Arcata, CA, June, 2005; Invited Speaker, National Academy of Sciences, Vienna, Austria, April, 2006; Distinguished Invited Speaker, Dean's Summit, Rice University, Houston, TX, April, 2007; Key Note Speaker, 2007 Xiangshan Science Conference on Social Computing, Chinese National Academy of Sciences, Beijing, China, April, 2007; Joint Invited Address, Mathematical Association of America and the Society for Mathematical Biology, MathFest, San Jose, California, August, 2007.

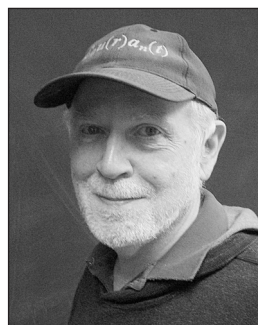
**Additional Information:** Presidential Faculty Fellowship Award, National Science Foundation and the Office of the President of the United States, 1992–1997; Board of Directors, Society for Mathematical Biology, 1994–1997; Board of Directors, Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), 1995–1996; Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring, National Science Foundation and the Office of the President of the United States, 1997; Distinguished Alumni, University of Wisconsin-Stevens Point; SACNAS Distinguished Scientist Award, Phoenix, AZ, 2001; Ulam Scholar, Center for Nonlinear Studies, Los Alamos National Laboratory, Los Alamos, NM, 2003; Richard Tapia Achievement Award for Scientific Scholarship, Civic Science and Diversity in Computing, Coalition to Diversity in Computing, 2003; External Faculty Member, Santa Fe Institute, 2003–2006; SIAM's Council (2003–2005 and 2006–2008, elected position); Adjunct Professor, Cornell University, 2004–2009; Co-Chair, National Advisory Committee, SAMSI (Statistical and Applied Mathematical Sciences Institute), 2004–2007; Honorary Professor, Xi'an Jiaotong University, China, May 2004; AMS Recognition: Programs that Make a Difference (MTBI/SUMS), American Mathematical Society, 2007; Member Alignment Committee, The Governor's P-20 Council (Governor of Arizona Council on Mathematics Education), 2007.

**Selected Publications:** 1. with Gumel, A., Clemence, D. P. and R. E. Mickens, eds., *Modeling the Dynamics of Human Diseases: Emerging Paradigms and Challenges*, Contemporary Mathematics, vol. 410, American Mathematical Society, 2006; 2. with Nuno, M., Chowell, G., and Wang, X., On the role of cross-immunity, vaccines and 'flu' survival, *Theoretical Population Biology*, **71** (2007), 20–29; 3. with Shim, E., Feng, Z., and Martcheva, M., An age-structured

epidemic model of rotavirus with vaccination, *J. Math. Biol.*, (in press); 4. with Fabio Sánchez, Xiahong Wang, Paul Gruenewald and Dennis Gorman, Drinking as an epidemic—A simple mathematical model with recovery and relapse, *Evidence Based Relapse Prevention*, edited by Katie Witkiewitz and G. Alan Marlatt, (in press); 5. with C. W. Castillo-Garsow, Increasing minority representation in the mathematical sciences: Good models but no will to scale up their impact, *Graduate Education—Creating the Faculty of the Future*, edited by Ronald G. Ehrenberg, Cornell University Press (in press).

**Statement:** The work of the Nominating Committee is critical to the function of AMS because of its role in identifying a pool of diverse and talented candidates for elected leadership positions. If elected to this committee, I would increase its diversity not only because of my own background but more importantly because of my past experiences with three national organizations, SIAM, SMB and SACNAS.

### Percy Deift



Professor, Courant Institute, New York University.

**Born:** September 10, 1945, Durban, South Africa.

**Ph.D.:** Princeton University, 1977.

**AMS Committees:** Chair, Advisory Panel for AMS-IMS-SIAM Summer Research Conferences, 2000–2004; Chair, Committee to Select the Gibbs Lecture for 2001 and 2002; Chair, Selection Committee for the George Polya Prize

for 2002; Chair, AMS-SIAM Committee to Select the Winner of the Norbert Wiener Prize for 2007.

**Selected Addresses:** Invited address, ICM, 1998; Plenary speaker, ICM, 2006; Plenary speaker, International Congress on Mathematical Physics, 2006.

**Additional Information:** Co-winner of George Polya Prize for 1998; Guggenheim Fellow, 1999–2000; Member of AAAS.

**Selected Publications:** 1. with X. Zhou, A steepest descent method for oscillatory Riemann-Hilbert problems. Asymptotics for the MKDV equation, *Ann. of Math. (2)*, **137** (1993), No. 2, 295–368. MR1207209 (94d:35143); 2. with A. Its and X. Zhou, A Riemann-Hilbert approach to asymptotic problems arising in the theory of random matrix models, and also in the theory of integrable statistical mechanics, *Ann. of Math. (2)*, **146** (1997), No. 1, 149–235. MR1469319 (98k:47097); 3. with T. Kriecherbauer, K. McLaughlin, S. Venakides and X. Zhou, Uniform asymptotics for polynomials orthogonal with respect to varying exponential weights and applications to universality questions in random matrix theory, *Comm. Pure Appl. Math.*, **52** (1999), No. 11, 1335–1425. MR1702716 (2001g:42050); 4. with J. Baik and K. Johansson, On the distribution of the length of the longest increasing subsequence of random permutations, *J. Amer. Math. Soc.*, **12** (1999), 1119–1178. MR1682248 (2000e:05006); 5. with X. Zhou, Perturbation theory for infinite dimensional integrable systems on the



line. A case study, *Acta Math.*, **188** (2002), No. 2, 163–262. MR1947893 (2005m:37172).

**Statement:** In finding mathematicians to serve on committees, the Nominating Committee plays an essential role in the workings of the AMS. If elected, I will do my best to ensure that there is a broad slate of highly competent and enthusiastic candidates to fill the various offices of the Society.

### Steffen Lempp



Professor, Department of Mathematics, University of Wisconsin.

**Born:** 1959 in Germany.

**Ph.D.:** University of Chicago, 1986.

**AMS Committees:** Chair, ASL Committee on Translations and ASL Subcommittee of the AMS Committee on Translations from Russian and Other Slavic Languages, 1995–2001; Logic editor, TAMS, since 2003.

**Selected Addresses:** Sixth Asian Logic Meeting, Beijing, May, 1996; International Conference on Mathematical Logic (1999 Malcev Meeting), Novosibirsk, Russia, August, 1999; ASL European Summer Meeting (Logic Colloquium '02), Münster, Germany, August, 2002; Winter Meeting of the Association for Symbolic Logic (in conjunction with the annual AMS Meeting), Phoenix, January, 2004; Dagstuhl Seminar on the Algorithmic-Logical Theory of Infinite Structures, Dagstuhl, Germany, October/November, 2007.

**Additional Information:** Research Fellowship at the University of Heidelberg, Germany, 1989; Postdoctoral Fellowship at the MSRI, Berkeley, 1989–1990; Sabbatical at the University of Leeds, England, 1996; Two-month research visit in Siena, Italy, 1998; Mercator Guest Professorship, University of Heidelberg, 2002–2003; Member, Institute for Mathematical Sciences, National University of Singapore, 2005. *Other memberships:* Association for Symbolic Logic; Deutsche Mathematiker-Vereinigung.

**Selected publications:** 1. with Manuel Lerman, The decidability of the existential theory of the poset of recursively enumerable degrees with jump relations, *Adv. Math.*, **120** (1996), No. 1, 1–142. MR1392275 (97i:03026); 2. with André Nies and Theodore A. Slaman, The  $\Pi_2$ -theory of the enumerable Turing degrees is undecidable, *Trans. Amer. Math. Soc.*, **350** (1998), No. 7, 2719–2736. MR1389784 (98j:03056); 3. with Sergey S. Goncharov, Valentina S. Harizanov, Michael C. Laskowski, and Charles F. D. McCoy, Trivial, strongly minimal theories are model complete after naming constants, *Proc. Amer. Math. Soc.*, **131** (2003), No. 12, 3901–3912. MR1999939 (2004g:03054); 4. with Sergey S. Goncharov and D. Reed Solomon, The computable dimension of ordered abelian groups, *Adv. Math.*, **175** (2003), No. 1, 102–143. MR1970243 (2004h:03093); 5. with Bakhadyr M. Khoussainov, Michael C. Laskowski, and D. Reed Solomon, On the computability-theoretic complexity of trivial, strongly minimal models, *Proc. Amer. Math. Soc.*, to appear.

**Statement:** The American Mathematical Society depends on many colleagues volunteering their time and effort to achieve its goal of supporting excellence in mathematical research and the education of the next generation of mathematicians. Its role is particularly critical in high-quality/low-cost publishing, the organization of professional meetings, and in lobbying for more financial support for mathematics. If elected I will do my best to help with the nomination of a broad and diverse spectrum of mathematicians to support the Society's mission.

### Louise Arakelian Raphael



Professor of Mathematics, Howard University.

**Born:** October 24, 1937, New York, New York.

**Ph.D.:** Catholic University, 1967.

**AMS Offices:** Member at Large of the Council, 2001–2003.

**AMS Committees:** AMS representative, CBMS Congressional Science Fellowship Committee, 1983–1986; AMS-MAA-SIAM Congressional Science Fellowship

Selection Panel, 1985–1987; Liaison Committee on Education in Mathematics, 1989–1994; Liaison Committee with AAAS, 1992–1994; Committee on Professional Ethics, 1995–1997; AMS-MAA Committee on Research in Undergraduate Mathematics Education (CRUME), 2000–2004; Committee on Education, 2000–2004.

**Selected Addresses:** AMS Special Session on Hopf Algebras, San Francisco, CA, January, 1991; International Conference on Analysis and Its Applications, Cairo, January, 1994; Neaman Workshop on Signal and Image Representation in Combined Spaces, Technion-Israel Institute of Technology, May, 1994; Splines and Wavelets, Athens, Georgia, 2005; Wavelets and Applications Conference, EPFL, Lausanne, Switzerland, July 2006.

**Additional Information:** *Administrative Posts:* Acting Administrative Officer, CBMS, Washington, DC, October 1985–May 1986; NSF Associate Program Director, Science and Engineering Education Directorate, Teacher Enhancement Program, September 1986–August 1987; NSF Program Director, Division of Mathematical Sciences and Education Directorates, 1987–1988. *National MAA Office:* First Vice-President, MAA, 1996–1998. *Select MAA Committees:* Chair, Task Force on Minorities in Mathematics, 1987–1989; Department Editor, Status of the Profession, *Undergraduate Mathematics Education TRENDS*, published by AMS, MAA and SIAM, 1989–1995; Organizing Committee for 1992 annual meeting, 1991; Chair, Strategic Initiatives Committee, 1996–1998; Chair, Externally Funded Projects, 1996–1998; Chair, Committee on Graduate Students, 2003–2004. *Visiting Positions:* Massachusetts Institute of Technology, 1977–1978 and 1989–1990; New York University, Courant Institute of Mathematical Sciences, 1997–1998; Cornell University, Spring 2004. *REU:* *Using Support Vector Machines to Classify Microarray Data*, PI, D. Williams, co-PI, Howard University, Summer 2005. *Community Service:* Howard University Grass Roots Math-

ematical Partnership, Director of informal partnership between parents, elementary school teachers/principals, community workers, and Howard University mathematicians, 2001–present.

**Selected Publications:** 1. with P. S. Hirschhorn, Coalgebraic foundations of the method of divided differences, *Adv. Math.*, **91** (1992), No. 1, 75–135. MR1144346 (92m:05012); 2. with S. E. Kelly and M. Kon, Pointwise convergence of wavelet expansions, *Bull. Amer. Math. Soc.*, **30** (1994), No. 1, 87–94. MR1248218 (95a:42048); 3. with S. E. Kelly and M. Kon, Local convergence for wavelet expansions, *J. Funct. Anal.*, **126** (1994), No. 1, 102–138. MR1305065 (95k:42048); 4. with M. Kon, Characterizing convergence rates for multiresolution approximations, *Signal and Image Representation in Combined Spaces* (J. Zeevi and R. Coifman, eds.), Wavelet Anal. Appl., vol. 7, Academic Press, San Diego, 1998, pp. 415–437. MR1614983 (99f:42067); 5. with M. Kon, Approximating functions in reproducing kernel Hilbert spaces via statistical learning theory, *Mod. Methods Math.*, Nashboro Press (2005), 271–286. MR2233457 (2007b:41029).

**Statement:** The AMS assists the profession face a wide range of challenges: maintaining excellence in research and our advanced degree programs; expanding support for new and established research areas; implementing educational changes required by mathematical—scientific work forces.

My years of experience as a research mathematician at Historically Black Colleges and Universities has included sabbaticals at major research universities and terms as an elected AMS council member, an MAA first vice president, and other national administrative posts. Over this span of time, I have come to know and work with a broad and diverse group of mathematicians, many of whom have the talent, experience and energy to implement programs that help their colleagues pursue research and their graduate-undergraduate students adapt to the challenges of entering the profession.

If elected, I will work with the committee members to nominate a diverse slate of qualified, experienced mathematicians including underrepresented groups.

### John R. Stembridge



Professor of Mathematics, University of Michigan.

**Born:** July 8, 1959, Glendale, California, USA.

**Ph.D.:** Massachusetts Institute of Technology, 1985.

**AMS Committees:** AMS-IMS-SIAM Committee on Joint Summer Research Conferences in the Mathematical Sciences, 1993–1996.

**Selected Addresses:** Commutative Algebra and Combinatorics,

Nagoya, 1990; Interactions of Combinatorics and Representation Theory, RIMS, Kyoto, 1998; Renaissance of Combinatorics, Tianjin, 2001; Computational Lie Theory, CRM, Montreal, 2002; Combinatorics & Optimization 40th Anniversary, Waterloo, 2007.

**Additional Information:** Sloan Fellow, 1990–1992; Presidential Young Investigator, 1990–1995; Editorial Board Member, *Proceedings of the AMS*, 1998–2005; Guggenheim Fellow, 2001; Editorial Board Member, *Transactions of the AMS*, 2006–.

**Selected Publications:** 1. Shifted tableaux and the projective representations of symmetric groups, *Adv. Math.*, **74** (1989), No. 1, 87–134. MR0991411 (90k:20026); 2. Hall-Littlewood functions, plane partitions and the Rogers-Ramanujan identities, *Trans. Amer. Math. Soc.*, **319** (1990), No. 2, 469–498. MR0986702 (90j:05021); 3. Canonical bases and self-evacuating tableaux, *Duke Math. J.*, **82** (1996), No. 3, 585–606. MR1387685 (97f:05193); 4. Combinatorial models for Weyl characters, *Adv. Math.*, **168** (2002), No. 1, 96–131. MR1907320 (2003j:17007); 5. A local characterization of simply-laced crystals, *Trans. Amer. Math. Soc.*, **355** (2003), No. 12, 4807–4823. MR1997585 (2005h:17024).

**Statement:** The continued success of the Society is dependent on the efforts of its many capable and energetic members. The Nominating Committee is charged with finding candidates for election to various offices of the Society. If elected, I pledge to seek out nominees with a broad range of experience and perspective who will best serve our collective interest by maintaining a strong program of publications, conferences, and public outreach.

### Richard A. Wentworth



Professor and Chair, Johns Hopkins University.

**Born:** October 5, 1963, Iowa City, Iowa, USA.

**Ph.D.:** Columbia University, 1990.

**AMS Committees:** AMS-NSF Postdoctoral Fellowship Selection Committee, 2001–2003 (Chair, 2003); Editorial Board, *Proceedings of the AMS*, 2002–2010; AMS Centennial Fellowship Selection Committee, 2003–2004.

**Selected Addresses:** Special Session, Eastern Sectional Meeting, Brooklyn, 1994; Invited hour address, Western Sectional Meeting, Salt Lake City, 1999; Special Session, Central Sectional Meeting, Ann Arbor, 2002.

**Additional Information:** Editorial Boards for the *American Journal of Mathematics* and *Geometriae Dedicata*; NSF Postdoctoral Fellow, 1990–1993; Sloan Research Fellow, 1995–1997.

**Selected Publications:** 1. The asymptotics of the Arakelov-Green's function and Faltings' delta invariant, *Commun. Math. Phys.*, **137** (1991), No. 3, 427–459. MR1105425 (92g:14019); 2. with G. Daskalopoulos, Local degeneration of the moduli space of vector bundles and factorization of rank two theta functions I, *Math. Ann.*, **297** (1993), No. 3, 417–466. MR1245399 (94m:32028); 3. with A. Bertram and G. Daskalopoulos, Gromov invariants for holomorphic maps from Riemann surfaces to Grassmannians, *J. Amer. Math. Soc.*, **9** (1996), No. 2, 529–571. MR1320154 (96f:14066); 4. with G. Daskalopoulos, Classification of Weil-Petersson isometries, *Amer. J. Math.*, **125** (2003),



No. 4, 941–975. MR1993745 (2004d:32011); 5. with G. Daskalopoulos, Convergence properties of the Yang-Mills flow on Kähler surfaces, *J. Reine Angew. Math.*, 575 (2004), 69–99. MR2097548 (2005m:53116).

**Statement:** The scope of activities of the AMS is vast. From promoting mathematics research, outreach and publicity programs, to fostering educational initiatives and establishing guidelines for professional ethics, to leading the discussion on the direction of the mathematical community. With such a diverse charge, it is crucial that the Nominating Committee identify capable and energetic candidates from a broad spectrum. If elected I will work with the Committee to fulfill this responsibility through extensive consultation with mathematicians around the country and a careful evaluation of the needs of the individual committees and their members.

### Editorial Boards Committee

#### David Brydges



Professor, University of British Columbia.

**Born:** July 1, 1949, Chester, Cheshire, United Kingdom.

**Ph.D.:** University of Michigan, 1976.

**AMS Committees:** Joint Summer Research Conference Committee, 1998–2002.

**Selected Addresses:** Plenary lecture, Annual Meeting of the American Mathematical Society, 1982.

**Additional Information:** Treasurer, then President, International Association of Mathematical Physics, 2000–2006.

**Selected Publications:** 1. with T. Spencer, Self-avoiding walk in 5 or more dimensions, *Comm. Math. Phys.*, 97 (1985), No. 1–2, 125–148. MR0782962 (86h:82056); 2. with John Z. Imbrie, Branched polymers and dimensional reduction, *Ann. Math.*, (2) 158 (2003), No. 3, 1019–1039. MR2031859 (2005c:82051).

#### Gui-Qiang Chen



Professor of Mathematics, Northwestern University.

**Born:** May 25, 1963, Ningbo, Zhejiang Province, PRC. Nationality: USA.

**Ph.D.:** Academia Sinica (Beijing), 1987.

**AMS Committees:** AMS Program Committee for the Joint International Meeting between the AMS and the Shanghai Mathematical Society (Dec. 17–21, 2008),

2006–2008; AMS-MAA Program Committee for the Joint Mathematics Meetings in San Diego (January 6–9, 2008), 2007–2008; AMS Program Committee for National Meetings, 2007–2010.

**Selected Addresses:** Plenary Speaker, International Conference on Problems and Perspectives on the Calculus

of Variations: Physics, Economics, and Geometry, Fields Institute, Toronto, Canada, 2001; Plenary Speaker, International Conference in Celebration of 50th Anniversary of the Instituto de Matemática Pura e Aplicada (IMPA), Rio de Janeiro, Brazil, 2002; Series of Four Lectures on Nonlinear Partial Differential Equations, Newton Institute, University of Cambridge, England, 2003; The 21st William J. Spencer Lecture in Mathematics, Kansas, 2004; Plenary Speaker, International Conference on Analysis, Modeling and Computation of PDE and Multiphase Flow, Stony Brook, 2004.

**Additional Information:** *Honors, Awards, and Other Recognitions:* Best Paper Award, Beijing Mathematical Society, PRC, 1988; Argonne-University of Chicago Fellow in Mathematics, USA, 1989–1991; Chinese National Medal of Natural Sciences, PRC, 1990; Alfred P. Sloan Foundation Fellow, USA, 1991–1997; Alexander von Humboldt Foundation Fellow, Germany, 2003–2007. *Editor for AMS Volumes:* Nonlinear Partial Differential Equations, *Contemporary Mathematics*, 238, AMS: Providence, 1999, ISBN-10: 0-8218-1196-7, ISBN-13: 978-0-8218-1196-2 (Edited with E. DiBenedetto); Nonlinear Partial Differential Equations: Electronic Edition, *Contemporary Mathematics*, 238, AMS: Providence, 1999, ISBN-10: 0-8218-2034-6, ISBN-13: 978-0-8218-2034-6 (Edited with E. DiBenedetto); Nonlinear Partial Differential Equations and Related Analysis, *Contemporary Mathematics*, 371, AMS: Providence, 2005, ISBN-10: 0-8218-3533-5, ISBN-13: 978-0-8218-3533-3 (Edited with G. Gasper and J. Jerome); Stochastic Analysis and Partial Differential Equations, *Contemporary Mathematics*, 429, AMS: Providence, 2007, ISBN-10: 0-8218-4059-2, ISBN-13: 978-0-8218-4059-7 (Edited with E. Hsu and M. Pinsky); *Editorial Boards:* *Zeitschrift für angewandte Mathematik und Physik* (ZAMP), 1991–; *Acta Mathematica Scientia*, 1996–; *Chinese Annals of Mathematics*, 1998–; *SIAM Journal of Mathematical Analysis*, 2000–; *Communications on Pure and Applied Analysis*, 2001–; *Acta Mathematicae Applicatae Sinica*, 2001–; *Journal of Partial Differential Equations*, 2001–; *Journal of Hyperbolic Differential Equations*, 2003–; *Visiting Memberships and Professorships:* Visiting Member, Courant Institute of Mathematical Sciences, New York University, 1987–1989; Visiting Member, Institute for Mathematics and Its Applications, Minneapolis, 1989; Visiting Member, Mathematical Sciences Research Institute, Berkeley, California, 1990–1991; Visiting Member, Institute for Advanced Study, Princeton, 1994; Visiting Professor, Department of Mathematics, University of Nice, France, 1996; Visiting Professor, École Normale Supérieure (Ulm-Paris), France, 1996, 2000; Senior Fellow, Institute for Pure and Applied Mathematics (IPAM), University of California at Los Angeles, 2001; Visiting Professor, Newton Institute, University of Cambridge, U. K., 2003; Visiting Professor, University of Heidelberg, Germany, 2004–2007; Visiting Member, Mittag-Leffler Institute of Mathematics, Royal Swedish Academy of Sciences, Sweden, 2005.

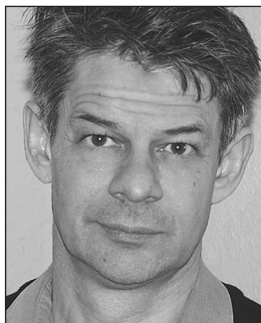
**Selected Publications:** 1. with D. Levermore and T.-P. Liu, Hyperbolic conservation laws with stiff relaxation terms and entropy, *Comm. Pure Appl. Math.*, 47 (1994), No. 6, 787–830. MR1280989 (95h:35133); 2. with M. Feldman, Multidimensional transonic shocks and free



boundary problems for nonlinear equations of mixed type, *J. Amer. Math. Soc.*, **16** (2003), No. 3, 461–494. MR1969202 (2004d:35182); 3. with H. Frid, Extended divergence-measure fields and the Euler equations of gas dynamics, *Comm. Math. Phys.*, **236** (2003), No. 2, 251–280. MR1981992 (2004f:35113); 4. with B. Perthame, Well-posedness for anisotropic degenerate parabolic-hyperbolic equations, *Ann. Inst. H. Poincaré Anal. Non Linéaire*, **20** (2003), No. 4, 645–668. MR1981403 (2004c:35235); 5. with M. Feldman, Global solutions to shock reflection by a large-angle wedge for potential flow, *Ann. Math.*, 108 pages, 2007 (in press).

**Statement:** The AMS has a longstanding tradition of excellence in disseminating mathematical progress through the AMS publications for the benefit of the mathematical community. The primary responsibility for maintaining and developing fully this tradition in the modern rapidly changing world of publishing lies with the AMS editorial boards. I think that the nominations by the Committee should reflect the high standard of the AMS publications, the demanding efficiency with which the AMS editorial boards serve, as well as the broad interests and diversity of the mathematical community. If elected, I will do my best to seek out well-qualified candidates by actively soliciting and evenhandedly considering suggestions from the community at large for each AMS editorial board.

#### Alan W. Reid



Pennzoil Company Regents Professor of Mathematics, The University of Texas.

**Born:** June 14, 1962, Aberdeen, U.K.

**Ph.D.:** University of Aberdeen, 1988.

**AMS Committees:** Centennial Fellowship Selection Committee, 2001–2003 (Chair, 2002–2003).

**Selected Addresses:** British Mathematical Colloquium, Heriot-Watt

University, 1995; Workshop on Groups and 3-Manifolds, C.R.M., Université de Montréal, 2001; AMS Invited Address, University of Michigan, 2002; XXth Nevanlinna Colloquium, Lausanne Switzerland, 2005; Geometry and Topology of 3-Manifolds, ICTP Trieste Italy, 2005.

**Additional Information:** Royal Society University Research Fellow, 1992–1996; Edinburgh Mathematical Society Sir Edmund Whittaker Prize, 1993; Alfred P. Sloan Foundation Research Fellow, 1997–2000; Editorial Boards: *Geometriae Dedicata*, *Bulletin*, *Journal* and *Proceedings of the London Mathematical Society*.

**Selected Publications:** 1. with D. Cooper and D. D. Long, Bundles and finite foliations, *Invent. Math.*, **118** (1994), No. 2, 255–283. MR1292113 (96h:57013); 2. with D. Cooper and D. D. Long, Essential closed surfaces in bounded 3-manifolds, *J. Amer. Math. Soc.*, **10** (1997), No. 3, 553–563. MR1431827 (97m:57021); 3. with I. Agol and D. D. Long, The Bianchi groups are separable on geometrically finite subgroups, *Ann. of Math. (2)*, **153** (2001), No.3, 599–621. MR1836283 (2002e:20099); 4. with D. D. Long, Pseudomodular surfaces, *J. Reine Angew. Math.*, **552** (2002),

77–100. MR1940433 (2003i:20091); 5. with C. Leininger, A combination theorem for Veech subgroups of the mapping class group, *Geom. Funct. Anal.*, **16** (2006), No.2, 403–436. MR2231468 (2007d:57002).

**Statement:** The enduring excellence and diversity of the book series and journals published by the AMS ensure that they continue to play an important role in the mathematical community. The success of the journals and book series relies on the editorial boards that run them. In my opinion, it is the job of the EBC to identify and recommend mathematicians that will advance the mission of these book series and journals, and continue their tradition of success.

#### Catherine Sulem



Professor of Mathematics, University of Toronto.

**Born:** June 19, 1955, Algiers, Algeria.

**Ph.D.:** Thèse d'État, Université Paris-Nord, 1983.

**Selected Addresses:** Invited address, AMS meeting, Austin, 1999; Invited address, SIAM-INRIA meeting on wave propagation, Santiago del Compostello, Spain, 2000; Plenary speaker, NSF-CBMS Regional

Research Conference on New perspectives for boundary value problems and their asymptotics, University of Texas-Pan American, 2005; Principal lecturer, short course on nonlinear waves, Reading, London Math. Society, 2005; Invited lecturer, CIMPA School on wave propagation, Cuernavaca, Mexico, 2006.

**Additional Information:** Krieger-Nelson Prize of the Canadian Mathematical Society, 1998; Associate Editor of the *Canadian Journal of Mathematics*, 1999–2004; Associate Editor of the *SIAM Journal of Mathematical Analysis* since 2001.

**Selected Publications:** 1. with P. L. Sulem, *The Nonlinear Schrödinger Equation: Self-Focusing and Wave Collapse*, Applied Mathematical Sciences, 139, Springer-Verlag, 1999. MR1696311 (2000f:35139); 2. with V. Buslaev, On asymptotic stability of solitary waves for nonlinear Schrödinger equations, *Ann. Inst. H. Poincaré Anal. Non Linéaire*, **20** (2003), No. 3, 419–475. MR1972870 (2004d:35229); 3. with J. Colliander, S. Raynor, and J. D. Wright, Ground state mass concentration in the  $L^2$ -critical nonlinear Schrödinger equation below  $H^1$ , *Math. Res. Lett.* **12** (2005), No. 2–3, 357–375. MR2150890 (2006:35300); 4. with T. Passot and P. L. Sulem, Linear versus nonlinear dissipation for critical nonlinear Schrödinger equation, *Phys. D*, **203** (2005), No. 3–4, 167–184. MR2138383 (2005k:35382); 5. with W. Craig, P. Guyenne, J. Hammack, and D. Henderson, Solitary water wave interactions, *Phys. Fluids*, **18** (2006), No. 5, 057106, 1–25. MR2259317.

**Statement:** AMS journals and books play a very important role for the diffusion of mathematical research and pedagogical material. I will do my best to contribute to the tradition of excellence of AMS publications and their accessibility to mathematics departments around the world.