Biographies of Candidates 1999

Biographical information about the candidates has been verified by the candidates, although in a few instances prior travel arrangements of the candidate at the time of assembly of the information made communication difficult or impossible. A candidate had the opportunity to make a statement of not more than 200 words on any subject matter without restriction and to list up to five of her or his research papers.

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 of Mathematical Statistics (IMS); International Mathematical Union (IMU); London Mathematical Society (LMS); Mathematical Association of America (MAA); 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); Operations Research Society of America (ORSA); Society for Industrial and Applied Mathematics (SIAM); The Institute of Management Sciences (TIMS).

Each candidate had the opportunity to supply a photograph to accompany her or his biographical information.

A candidate with an asterisk (*) beside his or her name was nominated in response to a petition.

President Elect

Hyman Bass

Roger Lyndon Collegiate Professor of Mathematics and Professor of Mathematics Education, University of Michigan.

Born: October 5, 1932, Houston, Texas.

Ph.D.: University of Chicago, 1959.

AMS Offices: Member at Large of the Council, 1969–1971; Vice President, 1980–1981; Board of Trustees, 1995–1998.

AMS Committees: *Bulletin* (New Series) Editorial Committee, 1969–1977, 1982-1986 (associate editor, Research-Expository Articles, 1982–1984; chair, 1985); Science Policy Committee, 1981–1990, 1995– (chair, 1996); Committee on Long-Range Planning, Board of Trustees, 1985–1986; Executive Committee of the Council, 1985–1987; Federal Policy Agenda Committee, 1992–1998; Board of Trustees, 1995–1998; *Electronic Research Announcements* Editorial Board, 1995–1999; Committee on Education, 1995– (chair); Liaison Committee with AAAS, 1996– (chair, 1997); AMS-MAA Committee on Research in Undergraduate Mathematics, 1997– ; *Notices* Editorial Board, 1998– .

Other Professional Positions: Committee to Select Speakers in the Algebra Section for the International Congresses of Mathematicians, 1970, 1974, 1978 (chair); Société des Collaborateurs de N. Bourbaki, 1970–1982; American Association for the Advancement of Science, chair, Section A, 1987–1988, 1997–1998. President, International Commission on Mathematics Instruction, 1998– .

Institute for Advanced Study: Member, Board of Trustees, 1992–1997; Oversight Board, Park City/IAS Mathematics Institute, 1993– .

Mathematical Sciences Research Institute, Berkeley: Board of Trustees, 1981–1986 (chair); Member, Science Advisory Council, 1987–1992, 1989–1992 (chair); Steering Committee, 1989–1992.

National Research Council: Member, Board on Mathematical Sciences, 1984–1987, 1993–1996; Member, Mathematical Sciences Education Board, 1991–1993, 1993– (chair); Center for Science, Mathematics, and Engineering Education, 1993– .

National S & T Center for Computation and Visualization of Geometric Structures, University of Minnesota: External Advisory Board, 1991–1995; Board of Governors, 1995–1997.

Selected Addresses: International Congresses of Mathematicians: Moscow, 1966, and Vancouver, 1974; AMS Invited Address, Cambridge, October 1969; Phillips Lecturer, Haverford College, fall 1970, 1975; Principal Lecturer, CBMS Regional Conference on Algebraic *K*-Theory, Colorado State University, August, 1973; Invited Address, British Mathematical Colloquium, spring 1973; Colloquium Lectures, Atlanta, January 1978; Barrett Memorial Lecturer, University of Tennessee, March, 1978; Karcher Lecturer, University of Oklahoma, August 1979; Distin-

guished Lecturer, University of Indiana, 1982; Distinguished Lecturer, Kansas State University, 1982; AMS Arnold Ross Lecturer, University of Maryland, April 1996; Knight Lecturer, University of Manitoba, June 1997; AMS Invited Address, Pretoria, June 1997.

Additional Information: Van Amringe Book Award, Columbia University, *Algebraic K-Theory*, 1969; Representative, Board of Editors, *American Journal of Mathematics*, 1971–1978; Cole Prize in Algebra, American Mathematical Society, 1975; Elected Member, American Academy of Arts and Sciences, 1980; Elected Fellow, American Association for the Advancement of Science, 1980; Elected Member, National Academy of Sciences, 1982; Phi Beta Kappa National Visiting Scholar, 1991–1992.

Selected Publications: 1. *On the ubiquity of Gorenstein rings*, Math. Z. **82** (1963), 8–28. MR **27** #3669; 2. with J. Milnor and J.-P. Serre, *Solution of the congruence subgroup problem for* $SL_n(n \geq 3)$ *and* $Sp_{2n}(n \geq 2)$, Inst. Hautes Études Sci. Publ. Math. **33** (1967), 59–137. MR **39** #5574; 3. *Algebraic K-Theory*, W. A. Benjamin, New York, 1968. MR **40**:2736; 4. with E. H. Connell and D. Wright, *The Jacobian Conjecture: Reduction of degree and formal expansion of the inverse*, Bull. Amer. Math. Soc. (N.S.) **7** (1982), 287–330. MR **83k**:14028; 5. *The Ihara-Selberg zeta function of a tree lattice*, Internat. J. Math. **3** (1992), 717–797. **94a**:11072; 6. with A. Lubotzky, *Non-arithmetic super-rigid groups: Counterexamples to Platonov's conjecture*, Ann. of Math., to appear.

Statement: Mathematics is one of the deepest and most powerful expressions of pure human reason and, at the same time, the most fundamental resource for description and analysis of the experiential world. Never before in history have these qualities of our discipline been more evident to us as professionals and more important to society at large.

So it is paradoxical that our field struggles with inadequate resources; with employment crises; with the inability to attract adequate numbers of talented students, especially women and minorities, into our ranks; and with little public perception or appreciation of the pervasive roles of mathematics in contemporary life. The AMS has essential roles to play in addressing these concerns. It should continue, in concert with its sister sciences, as a strong public advocate for the support of fundamental research, as well as interdisciplinary and applied research. And it should foster more effective public communication about the nature and beauty of mathematical ideas and about the human drama of doing mathematics. Some of this can be accomplished in the press and public media. But fundamentally this must be done with our massive and captive audience, our students.

At the graduate level the basic culture of mathematics remains a powerful platform for a multiplicity of professional opportunities, many of them nonacademic. To give our Ph.D.'s this professional versatility, we should not abandon our core disciplinary training, but should seek to enhance it with critical resources that can build professional capacity: auxiliary training in probability and statistics; new computer skills; and, perhaps most important, enhanced ability in communication and teaching. Mathematicians should become better skilled at communicating mathematical ideas to students, to technical users of mathematics, and to the general public. In turn, we must work actively to improve the curriculum and instruction in our undergraduate programs and to accord this responsibility the status and resources it demands. This is a site where our own actions can do much to improve the mathematical preparation of the students who enter and leave our colleges and universities, as well as the mathematical literacy of our work force and citizenry.

Less obvious but nonetheless important is our crucial role in K–12 teacher preparation, for it is in our courses that teachers learn mathematical content and models of teaching. Mathematicians thus have essential contributions to make in education at all levels, to the preparation of technical professionals, and to a public sense of what constitutes mathematical literacy for citizens of a technological democracy like ours.

Daniel W. Stroock

Professor of Mathematics, Massachusetts Institute of Technology.

Born: March 20, 1940, New York, New York.

Ph.D.: Rockefeller University, 1966.

AMS Committees: *Transactions and Memoirs* Editorial Committee, 1975–1978; Committee to Select Hour Speakers for Far Western Sectional Meetings, 1979–1980; *Proceedings* Editorial Committee, 1983–1987; Committee on Committees, 1997–1998; Science Policy Committee, 1998– .

Selected Addresses: Invited Address, Claremont, October 1978; Invited Address, International Congress of Mathematicians, Warsaw, 1983; Hour Lecture, Canadian Mathematical Society, 1992; Invited Address, International Joint Mathematics Meetings of the AMS and the Sociedad Matemàtica Mexicana (SMM), Merida, Mexico, December 1993; AMS Colloquium Lectures, San Diego, January 1997.

Additional Information: ***Awards and Affiliations***: Steele Prize (with S. R. S. Varadhan), 1997. ***Member***: American Academy of Arts and Sciences; National Academy of Sciences. ***Other Organizations***: Serves on the NRC Board of Mathematical Sciences and on the editorial boards of various other journals.

Selected Publications: 1. with S. R. S. Varadhan, *Multidimensional Diffusion Processes*, Springer-Verlag, Berlin and New York, 1979. MR **81f**:60108; 2. with R. Holley, *In one and two dimensions, every stationary measure for a stochastic Ising model is a Gibbs state*, Comm. Math. Phys. **55** (1977), 37–45. MR **56** #9741; 3. *The Malliavin calculus and its application to second order parabolic differential equations*. I. Math. Systems Theory **14** (1981), 25–65. MR **84d**:60092a; *The Malliavin calculus and its application to second order parabolic differential equations*. II. Math. Sys-

tems Theory **14** (1981), 141–171. MR **84d**:60092b; 4. *Probability Theory, an Analytic View*, Cambridge University Press, Cambridge, 1993. **95f**:60003; 5. with P. Malliavin, *Short time behavior of the heat kernel and its logarithmic derivatives*, J. Differential Geom. **44** (1996), 550–570. MR **98c**:58164.

Statement: Approximately 25,000 of the world's 6 billion inhabitants belong to the AMS, and approximately 16,000 of these are among the 250 million residents of the United States. Thus, however one figures it, membership in the AMS is membership in a rather peculiar and highly specialized organization. In fact, an interest in mathematics is the only compelling reason for joining the AMS. Personally, I find this reality clarifying. Namely, it means to me that the AMS has a well-defined mission: *the promotion of mathematics*. Thus, if I am elected president of the AMS, I will do my best to mobilize the AMS to maintain and improve the position of mathematics as an integral and essential part of the human endeavor. If the members of the AMS are not ready to undertake and support such activity, who among the remaining 99.9936 percent of the American population can be expected to do so?

Vice President

David Eisenbud

Director, Mathematical Sciences Research Institute; Professor of Mathematics, University of California, Berkeley.

Born: April 8, 1947, New York, New York.

Ph.D.: University of Chicago, 1970.

AMS Offices: Member at Large of the Council, 1983–1985.

AMS Committees: *Proceedings* Editorial Committee, 1978–1982; Centennial Fellowships Committee, 1989–1990; *Bulletin* (New Series) Editorial Committee, 1993–1999 (associate editor, Research-Expository Papers, 1993–1996; editor, Research-Expository Surveys, 1996–1998; chair, 1997–1999); Committee on Professional Ethics, 1994–1995.

Selected Addresses: Invited Lecture, International Congress of Mathematicians, 1974; AMS Invited Address, St. Louis, 1977; Plenary Address, 19th Brazilian Mathematical Colloquium, 1993; Distinguished Lecturer Program, University of New Mexico, Las Cruces, 1996; Emmy Noether Lectures, Bar-Ilan University, 1999.

Additional Information: ***Non-AMS Editorships:*** Wadsworth Advanced Book Series, 1981–1992; *Astérisque* (Société Mathématique de France), 1982–1987; *Journal of Algebraic Geometry*, 1990–1995; Springer-Verlag Series, Computation in Mathematics, 1995– ; *Mathematische Annalen*, 1997–1998; Bulletin de la Société Mathématique de France, 1999– . ***Other positions held:*** Lecturer, Brandeis University, 1970–1972; Assistant Professor, Brandeis University, 1972–1973; Sloan Foundation Fellow, 1973–1975; Visiting Scholar, Harvard University, 1973–1974; Fellow, IHES. (Bures-sur-Yvette), 1974–1975; Associate Professor, Brandeis University 1976–1980; Visiting Professor, University of Bonn (SFB 40), 1979–1980; Professor, Brandeis University, 1980–1998; Research Professor, Mathematical Sciences Research Institute, 1986–1987; Visiting Professor, Harvard University, 1987–1988, and Chercheur Associé à l'Institut Henri Poincaré (CNRS), Paris, spring 1995. ***Member:*** AMS, AWM, MAA, SIAM.

Selected Publications: 1. with H. Levine, *An algebraic formula for the degree of a C^∞ map germ*, Ann. of Math. **106** (1977), 19–44; 2. with W. D. Neumann, *Three-Dimensional Link Theory and Invariants of Plane Curve Singularities*, Ann. of Math. Stud., vol. 110, Princeton University Press, Princeton, NJ, 1985. MR **87g**:57007; 3. *Commutative Algebra with a View toward Algebraic Geometry*, Graduate Texts in Mathematics, vol. 150, Springer-Verlag, 1995; 4. with J. Harris, *Schemes, the Language of Modern Algebraic Geometry*, Wadsworth, Belmont, California, 1992 (Revised version to appear as: *The Geometry of Schemes*, Springer-Verlag Graduate Texts in Mathematics, 1999); 5. with S. Popescu, *Gale duality and free resolutions of ideals of points*, Invent. Math. 1999, to appear.

Statement: The American Mathematical Society, together with its many sister institutions such as SIAM, works to promote research in the mathematical sciences. This research now takes place at an enormous range of different institutions, from traditional research universities to colleges and industrial laboratories. The mathematicians involved are increasingly diverse. As director of MSRI I have worked to encourage this diversity and to serve the whole range of mathematical enterprises. I believe that this is what the AMS should do too.

Mathematicians should be better heard by the public, by the NSF, in Congress, and in the news media. The AMS is one of the primary voices speaking for us. From my MSRI experience I have the background and contacts to help make this communication more effective and more useful to the field.

Keeping the mathematical sciences establishment healthy is important for science, for commercial applications, and for human culture. This is an enormous and highly collaborative enterprise. I am eager for the chance to contribute to it as AMS vice president.

Thomas G. Kurtz

Professor of Mathematics and Statistics, University of Wisconsin-Madison.

Born: July 14, 1941, Kansas City, Missouri.

Ph.D.: Stanford University, 1967.

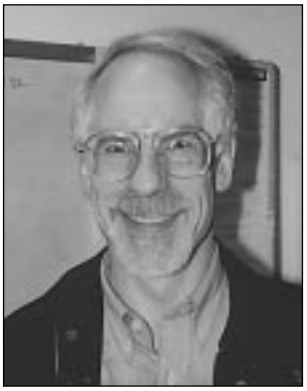
AMS Committees: *Proceedings* Editorial Committee (associate editor), 1978–1982; Committee on Academic Freedom, Tenure, and Employment Security, 1988–1991; AMS-SIAM Birkhoff Prize Selection Committee (chair), 1994.

Selected Addresses: Principal Lecturer, CBMS-NSF Regional Conference, Missoula, Montana, 1979; IMS Special Invited Paper, Davis, California, 1980; IMS Special Invited Paper, Washington, DC, 1989; Keynote Lecture, INFORMS Applied Probability Conference, Atlanta, 1995; AMS Special Session on Stochastic Models, San Diego, January 1997.
Additional Information: NSF Division of Mathematical Sciences Advisory Committee, 1987–1990 (chair, 1988–1989); Council of the Bernoulli Society, 1987–1991; Committee on Conferences on Stochastic Processes, 1987– (chair, 1995–1997); NRC Committee on Applied and Theoretical Statistics, 1998– ; Fellow, Institute of Mathematical Statistics. ***Member:*** AMS, IMS, INFORMS, ISI, MAA, SIAM.
Selected Publications: 1. *Approximation of Population Processes*, CBMS-NSF Regional Conference Series in Applied Mathematics, no. 36, Society for Industrial and Applied Mathematics (SIAM), Philadelphia, PA, 1981. MR **82j**:60160; 2. with S. N. Ethier, *Markov Processes: Characterization and Convergence*, Wiley Series in Probability and Mathematical Statistics: Probability and Mathematical Statistics, John Wiley & Sons, Inc., New York, 1986. MR **88a**:60130; 3. with P. E. Protter, Weak convergence of stochastic integrals and differential equations, *Probabilistic Models for Nonlinear Partial Differential Equations*, Lecture Notes in Math., vol. 1627, Springer, Berlin, 1996, pp. 1–41. MR **98h**:60073; Weak convergence of stochastic integrals and differential equations. II. Infinite-dimensional case. *Probabilistic Models for Nonlinear Partial Differential Equations* (Montecatini Terme, 1995), Lecture Notes in Math., vol. 1627, Springer, Berlin, 1996, pp. 197–285. MR **98h**:6007; 4. with P. Donnelly, *A countable representation of the Fleming-Viot measure-valued diffusion*, Ann. Probab. **24** (1996), 698–742. MR **98f**:60162; 5. with R. H. Stockbridge, *Existence of Markov controls, and characterization of optimal Markov controls* SIAM J. Control Optim. **36** (1998), 609–653. MR **99b**:93051.
Statement: The first responsibility of the American Mathematical Society is to ensure the long-term vitality of mathematics as a subject and as a profession. Our success in meeting that responsibility depends on the relationships we build and maintain with the organizations that support our work —the colleges and universities that employ most of us, the federal agencies that supply most of the academic research support, and, increasingly, the industries that provide new opportunities for employment and collaboration—on our ability to foster the development of young mathematicians as future scholars, teachers, and organizational leaders; on our maintaining the intellectual energy and excitement that drives new developments; and on our maintaining a clear view of the unique contributions that mathematics can bring to the interdisciplinary collaborations that now play a central role in our profession.

I believe that I have the necessary experience to contribute to the work of the AMS in all of these directions: leadership within my university, service with national agencies, development of a successful summer program for young faculty in probability, and involvement in a variety of interdisciplinary programs at both the national and local levels. I look forward to the opportunity.

Trustee

Eric M. Friedlander



Henry S. Noyes Professor of Mathematics, Northwestern University.
Born: January 7, 1944, Santurce, Puerto Rico.
Ph.D: Massachusetts Institute of Technology, 1970.
AMS Committees: Committee on Summer Institutes and Special Symposia, 1986–1987; Committee on the Publication Program, 1990–1994; Committee on Science Policy, 1992–1994; *Proceedings* Editorial Committee, 1992–1995; Nominating Committee, 1995–1998 (chair, 1997); *Bulletin* (New Series) Editorial Committee (associate editor for Research Reports), 1995–.

Selected Addresses: Invited Address, Columbia, MO, 1985; Surrogate Plenary Speaker for Andrei Suslin, International Congress of Mathematicians, Berkeley, 1986; Zabrodsky Memorial Address, Jerusalem, 1992; Séminaire Bourbaki, Paris, 1997; Invited Speaker, International Congress of Mathematicians, Berlin, 1998.

Additional Information: Chair, Department of Mathematics, Northwestern University, 1987–1990, 1999– ; Northwestern University Budget Resources Advisory Committee, 1987–1990; Academic Associate Dean for Science, Northwestern University, 1995–1998.

Selected Publications: 1. with A. Suslin, *Cohomology of finite group schemes over a field*, Invent. Math. **127** (1997), 209–270. MR **98h**:14055a; 2. with A. Suslin and C. Bendel, *Infinitesimal 1-parameter subgroups and cohomology*, J. Amer. Math. Soc. **10** (1997), 693–728. MR **98h**:14055b; *Support varieties for infinitesimal group schemes*, J. Amer. Math. Soc. **10** (1997), 729–759. MR **98h**:14055c; 3. with H. B. Lawson, *Moving algebraic cycles of bounded degree*, Invent. Math. **132** (1998), 91–119; 4. with V. Franjou, A. Scorichenko, and A. Suslin, *General linear and functor cohomology over finite fields*, Ann. of Math., to appear; 5. with A. Suslin and V. Voevodsky, *Cycles, Transfers, and Motivic Homology Theories*, Ann. of Math. Stud., to appear.

Statement: Over the years the AMS has expanded its role beyond the traditional one of supporting mathematical research through meetings and publications. To mention but three examples: the AMS addresses issues of salary, employment, and diversity which concern its members; the AMS engages in efforts to encourage funding and public support for the profession; and the AMS takes a more active role in issues of mathematical education. The broad scope of these activities requires the AMS to be sensitive to many factors, including the rapid changes occurring in book and journal publication, public and governmental attitudes toward support for mathematics, and demographic trends. If I am elected a trustee of the AMS, I will encourage the diverse activities of the AMS while keeping watch over the financial aspects of the Society.

Donald E. McClure

Professor of Applied Mathematics, Brown University.
Born: October 22, 1944, Portland, Oregon.
Ph.D.: Brown University, 1970.
AMS Offices: Board of Trustees, 1995– (chair, 1998; secretary, 1995–1996).

AMS Committees: Data Subcommittee of the Committee on Employment and Educational Policy, 1985–1989; AMS-SIAM Committee on Applied Mathematics, 1986–1988; AMS-MAA Data Committee, 1990–1992 (chair, 1990–1992) and AMS-IMS-MAA Data Committee, 1993 (chair); AMS Employment Task Force, 1992; Committee on Resource Needs for Excellence in Mathematics Instruction, 1993– ; Advisory Panel for the AMS-SIAM-Sloan Foundation Project on Nontraditional Career Opportunities in the Mathematical Sciences, 1995–1997; Committee on the Profession (CoProf), 1994– (chair, 1998–); Committee on Long-Range Planning, 1998; Task Force on Membership, 1998– .

Selected Addresses: Special Session on Radon Transforms and Computed Tomography, New Orleans, January 1986; Symposium on Medical Imaging, Annual Meeting of the AAAS, Chicago, 1987; Mathematical Methods in Tomography, Oberwolfach, 1990; Special Session on Statistical Methods in Image Processing, Remote Sensing, and Robotics, IMS, Philadelphia, 1991; Special Session on Research and Applications in Advanced Technology, International Statistical Institute, Florence, 1993.

Additional Information: Trustee, Consortium for Scientific Computing (John von Neumann Center), 1986–1991 (Secretary of the Corporation, 1989–1991); Cofounder and Principal, Mathematical Technologies Inc.; Associate Director, Center for Intelligent Control Systems, Brown-Harvard-MIT, 1986–1998. ***Member:*** AAAS, ASA, AWM, IMS, MAA, SIAM, SMPTE.

Selected Publications: 1. *Image models in pattern theory*, Computer Graphics Image Processing **12** (1980), 309–325. Republished in *Image Modeling* (A. Rosenfeld, ed.), Academic Press, New York, London, 1981, pp. 259–275. MR **83c**:68003; 2. with S. Geman, *Statistical methods for tomographic image reconstruction*, Bull. Inst. Internat. Statist. **52** (1987). MR **90g**:62005d; 3. *Reports on the surveys of new doctorates*, Annual AMS-MAA Surveys, First Reports: Notices Amer. Math. Soc. (November 1990), 1217–1222; (November 1991), 1086–1094; (November 1992), 1026–1033; (November 1993), 1164–1171; 4. with D. Geman and S. Geman, *A nonlinear filter for film restoration and other problems in image processing*, CVGIP: Graphical Models and Image Processing **54** (1992), 281–289; 5. with S. Geman and K. Manbeck, A comprehensive statistical model for single photon emission computed tomography, *Markov Random Fields: Theory and Application* (R. Chellappa and A. Jain, eds.), Academic Press (Harcourt Brace Jovanovich), Chicago 1993, pp. 93–130.

Statement: The primary responsibility of the trustees is to exercise sound judgment in management of fiscal affairs and issues that potentially have a far-reaching impact on the financial condition of the Society. I shall approach the responsibilities of the position with the objective of maximizing the ability of the Society to fulfill its primary mission in support of mathematical scholarship and research, as reflected in policies adopted by the Council. I believe that achieving this objective requires prudence and a long-range view towards financial planning. There are still uncertainties in the financial future of the Society linked to its leading role in mathematics publications and to the evolution of modes of scholarly communication. The trustees remain cognizant of these uncertainties.

I shall remain active, as I have been, in efforts of the Society concerned with the status of professions in the mathematical sciences, even though these personal interests are not part of the main job of a trustee. In particular, I shall work to improve and broaden employment opportunities for mathematicians, to address current concerns about fair employment practices in the use of adjunct and part-time faculty, to increase the awareness among mathematicians of areas in technology and science where mathematics is needed, to increase awareness in kindred disciplines of the important role of mathematics, to encourage and enable participation in mathematics by young people truly reflective of the spectrum of our society, to improve the public regard and support of higher education, and to foster support for research in mathematics.

Member at Large of the Council

Patricia Bauman

Professor of Mathematics, Purdue University.
Born: July 27, 1949, St. Paul, Minnesota.
Ph.D.: University of Minnesota, Minneapolis, 1982.
Selected Addresses: Invited Address, AWM-NSF Symposium: The Legacy of Sonya Kovalevsky, Radcliffe College, 1985; Invited Address, Thirty-eighth Meeting of the Society for Natural Philosophy: Topics in Nonlinear Elasticity, Cornell University, 1994; AMS Invited Address, University of Missouri, Columbia, 1996; Invited Address, Midwest PDE Seminar and Conference in Honor of Gene Fabes' 60th Birthday, University of Minnesota, Minneapolis, 1997; Second SIAM Conference on Mathematical Aspects of Materials Science: Symposium on Superconductivity, 1997.
Additional Information: ***Awards:*** NSF Postdoctoral Research Fellowship, 1982–1983; C. L. E. Moore Instructorship, MIT, 1983–1984; AMS Centennial Research Fellowship, 1994–1995. ***Co-organizer:*** Midwest PDE Seminar: 1992, 1996; Special Session on Partial Differential Equations, AMS Meeting, Courant Institute of Mathematical Sciences, New York, 1996; IMA Participating Institution International Conference: A Workshop on Superconductivity, Purdue

University, West Lafayette, 1998. ***Associate Editor:*** *SIAM Journal on Mathematical Analysis*, 1998– . ***Member:*** AMS, AWM, SIAM, SNP.

Selected Publications: 1. *Positive solutions of elliptic equations in nondivergence form and their adjoints*, Ark. Mat. **22** (2) (1984), 153–173. MR **86m**:35008; 2. with N. Owen and D. Phillips, *Maximum principles and a priori estimates for a class of problems from nonlinear elasticity*, Ann. Inst. H. Poincaré Anal. Non Linéaire **8** (1991), 119–157. MR **92c**:35040; 3. with N. Carlson and D. Phillips, *On the zeroes of solutions to Ginzburg-Landau type systems*, SIAM J. Math. Anal. **24** (1993), 1283–1293. MR **94g**:35187; 4. with C. N. Chen, D. Phillips, and P. Sternberg, *Vortex annihilation in nonlinear heat flow for Ginzburg-Landau systems*, European J. Appl. Math. **6** (1994), 115–126. MR **96b**:35219; 5. with D. Phillips and Tang Qi, *Stable nucleation for the Ginzburg-Landau system with an applied magnetic field*, Arch. Rational Mech. Anal. **142** (1998), 1–43.

Statement: The AMS plays a central role in promoting excellence in mathematical research and education. It is also central to the process of dialogue and representation of views on current issues in the mathematical community. In an era of increasing emphasis on industry and product-related research, we must act to preserve the excellence of traditional fundamental research and provide leadership for research in new interdisciplinary areas in mathematics. We must promote the development of young mathematicians and take an active role in facilitating their employment in good academic and nonacademic positions. We must encourage the participation of highly qualified women and minorities in mathematics, and we must promote understanding and appreciation of the role of mathematics in our society.

As a mathematician whose research is in the intersection of pure and applied mathematics, I would appreciate the opportunity to serve the AMS in facing these challenges.

William Fulton

M. S. Keeler Professor of Mathematics, University of Michigan.

Born: August 29, 1939, Boston, Massachusetts.

Ph.D.: Princeton University, 1966.

AMS Committees: *Journal of the American Mathematical Society* Editorial Committee, 1993– (managing editor, 1995–1998).

Selected Addresses: International Congress of Mathematicians (Algebraic Geometry Section), Warsaw, 1983; Roever Lectures, Washington University, St. Louis, 1989; Rademacher Lectures, University of Pennsylvania, 1994; Bourbaki Seminar, Paris, 1998; Invited Address, Joint AMS-SMM International Meeting, Denton, 1999.

Additional Information: Guggenheim Fellowship, 1980–1981; Steele Prize for Mathematical Exposition, 1996; Erlander Visiting Professorship, Sweden, 1996–1997; Elected Member, National Academy of Sciences, 1997; Elected Member, American Academy of Arts and Sciences, 1998.

Selected Publications: 1. *Intersection Theory*, Springer-Verlag, Berlin, New York, 1984. MR **85k**:14004; 2. with J. Harris, *Representation Theory*, Graduate Texts in Mathematics, vol. 129, Springer-Verlag, New York, 1991. MR **93a**:20069; 3. *Introduction to Toric Varieties*, Ann. of Math. Stud., vol. 131, Princeton University Press, Princeton, NJ, 1993. MR **94g**:14028; 4. with R. MacPherson, *A compactification of configuration spaces*, Ann. of Math. **139** (1994), 183–225. MR **95j**:14002; 5. with A. Buch, *Chern class formulas for quiver varieties*, Invent. Math. **135** (1999), 665–687.

Statement: The fundamental mission of the AMS is to promote mathematical research of high quality. This requires concern about prospects for young mathematicians and nurturing conditions in our colleges and universities that will attract the best candidates to enter and thrive in our profession. It also requires fostering support for mathematics from the general public.

As a major publisher of mathematics, the AMS should lead in the quality of its journals and books and in assuring that publications are affordable for libraries and individuals. The Council of the AMS should resist the urge to respond to every issue by forming another committee.

Susan C. Geller

Professor of Mathematics, Professor of Veterinary Anatomy and Public Health, Texas A&M University.

Born: October 27, 1948, Newark, New Jersey.

Ph.D.: Cornell University, 1975.

AMS Committee: AMS representative, Joint Committee on Women in the Mathematical Sciences, 1985–1991 (chair, 1988–1991).

Selected Addresses: AMS Summer Research Conference on Algebraic K-Theory, University of Colorado, June 1983; Plenary Address, MAA, New Jersey Section, November 1987; NATO Conference on Algebraic K-Theory at Lake Louise, Canada, December 1991; Special Session on Algebraic K-Theory, Rider College, NJ, October 1996; Special Session on Singularities in Algebraic and Analytic Geometry, San Antonio, January, 1999.

Additional Information: Executive Committee Member, Association for Women in Mathematics, 1989–1991; Committee on Participation of Women, MAA, Skitwright, 1988–1993; MAA Dolciani Series Editorial Board, 1997–2000. ***Member:*** AMS, MAA, AWM, American Statistical Association, American Association of University Women.

Selected Publications: 1. with L. Reid and C. Weibel, *The cyclic homology and K-theory of curves*, J. Reine Angew.

Math. **393** (1989), 39–90. MR **89m**:14006; 2. with C. Weibel, *Étale descent for Hochschild and cyclic homology*, Comm. Math. Helv. **66** (1991), 368–388. MR **92e**:19006; 3. with P. Natarajan and K. Smith, *Endomorphisms of group automata*, Math. Pannon. **4** (1993), 79–93. MR **95b**:68074; 4. with C. Weibel, *Hodge decompositions of Loday symbols in algebraic K-Theory and cyclic homology*, *K*-Theory **8** (1994), 587–632. MR **96g**:19003; 5. with G. Cortinas and C. Weibel, *The Artinian Berger conjecture*, Math. Z. **228** (1998), 569–588.

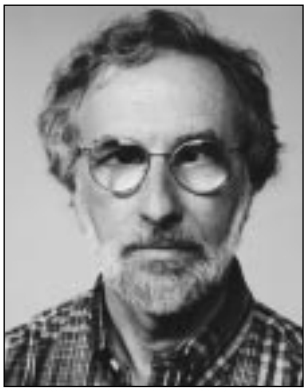
Statement: The AMS traditionally supports the health of the mathematics profession in the areas of research, teaching, and service. In all these areas we need to break out of insular mode and welcome a diversity of people, places, and organizations.

The research mission is the primary focus of the AMS. We need to continue to explore all avenues of encouraging mathematics research. We need to open the opportunities for research to a wider diversity of people, including minorities, females, and those working at traditionally nonresearch institutions or in industry.

The teaching mission of the AMS has existed for decades but has rarely been articulated as clearly as the research mission. Yet we are most visible to the public in the area of mathematics education, where we need to not only do a good job but be perceived as doing a good job. Thus, we need to educate the legislators and public about the usefulness and necessity of mathematics to help obtain more funding for mathematics at all levels.

A key component of the service mission is working with other organizations in mathematics and in the mathematical sciences. When organizations work in isolation, the public and legislatures are loathe to take their explanations and needs seriously. The AMS should take the lead in coordinating with others.

Martin Golubitsky



Cullen Professor of Mathematics, University of Houston.

Born: April 5, 1945, Philadelphia, Pennsylvania.

Ph.D.: Massachusetts Institute of Technology, 1970.

AMS Committees: AMS-IMS-SIAM Committee on Joint Summer Research Conferences in the Mathematical Sciences, 1987–1992 (chair, 1991–1992); Editorial Boards Committee, 1994–1996 (chair, 1995); Task Force on Electronic Journals, 1995; *Notices* Editorial Board, 1998– (covers editor); Short Course Subcommittee, 1999– .

Selected Addresses: Principal Lecturer, Summer Research Institute, Australian Mathematical Society, Armidale, NSW, 1987; AMS Invited Address, Dayton, October 1992; Plenary Lecture, Dynamical Systems Activity Group, SIAM, Snowbird, 1992; AMS Invited Lecture, Sociedad Matematica Mexicana, Congreso Nacional XXIX, San Luis Potosi, 1996; Invited Lecture, Nonlinear Science Festival, Niels Bohr Institute, Copenhagen, 1998.

Additional Information: ***Organizing Committees:*** AMS Summer Research Institute on Singularities, July/August 1981; AMS-IMS-SIAM Summer Research Conference on Multiparameter Bifurcation Theory, July 1985. AAAS Fellow, 1987; SIAM Council, 1990–1995; Sigma Xi Faculty Research Award, University of Houston, 1991; SIAM Visiting Lecturer Program, 1993– ; AAAS Council Delegate, 1996–1998; Farfel Award, University of Houston, 1997.

Selected Publications: 1. with V. Guillemin, *Stable Mappings and Their Singularities*, Graduate Texts in Mathematics, vol. 14, Springer-Verlag, New York, Heidelberg, 1973. MR **49** #6269; 2. with D. G. Schaeffer and I. N. Stewart, *Singularities and Groups in Bifurcation Theory*, Vol. I. Applied Mathematical Sciences, vol. 51, Springer-Verlag, New York, Berlin, 1985. MR **86e**:58014; *Singularities and Groups in Bifurcation Theory*, Vol. II. Applied Mathematical Sciences, vol. 69, Springer-Verlag, New York, Berlin, 1988. MR **89m**:58038; 3. with M. Dellnitz and I. Melbourne, *The structure of symmetric attractors*, Arch. Rational Mech. Anal. **123** (1993), 75–98. MR **94m**:58141; 4. with V. G. LeBlanc and I. Melbourne, *Meandering of the spiral tip: An alternative approach*, J. Nonlinear. Sci. **7** (1997), 557–586. MR **98k**:58168; 5. with P. L. Buono, J. J. Collins, and I. Stewart, *A modular network for legged locomotion*, Phys. D **115** (1998), 56–72. MR **99d**:92051.

Statement: Mathematical research is not done in a vacuum. Much of the stimulation for mathematical research comes from areas outside of mathematics, and much of the support for mathematics is based on the belief that mathematical research contributes to areas outside of mathematics.

Traditionally, the AMS has been excellent at fostering basic mathematical research and, through its journals and book series, making the results of this research available to the mathematics community. The AMS must continue these activities.

In today's climate it is important that the AMS does an equally excellent job of encouraging connections between mathematics and other disciplines and of disseminating the results of mathematical research outside of the mathematics community. Besides teaching, there are two ways that we communicate mathematics to those outside of mathematics. The first is through expository writing, and the second is through collaboration. As a member of the Council I would like to see the AMS increase the recognition of these other forms of communication.

Ellen E. Kirkman

Professor of Mathematics, Wake Forest University.

Born: July 28, 1948, St. Paul, Minnesota.

Ph.D.: Michigan State University, 1975.

Selected Addresses: Special Session on Associative Algebras, Jerusalem, May 1995; AMS Invited Address, Los Angeles, November 1995; Invited Address, MAA Southeastern Section Meeting, Atlanta, March 1997; Departmental Colloquium, University of Wisconsin, Madison, November 1997; Special Session on Representation Theory of Algebras, Denton, May 1999.

Additional Information: ***Co-organizer, AMS Special Sessions***: Noncommutative Algebra, San Francisco, January 1995; Rings and Modules, Baton Rouge, April 1996; Noncommutative Algebra, Winston-Salem, October 1998. ***MAA Southeastern Section***: North Carolina State Director, 1989–1991; Section Lecturer, 1996–1997; Lecturer, EDGE program, June 1999. ***Member:*** AMS, ASA, AWM, MAA.

Selected Publications: 1. with J. Kuzmanovich, *Global dimensions of a class of tiled orders*, J. Algebra **127** (1989), 57–72. MR **91c**:16011; 2. with E. Green and J. Kuzmanovich, *Finitistic dimensions of finite-dimensional monomial algebras*, J. Algebra **136** (1991), 37–50. MR **92a**:16011; 3. with C. Procesi and L. Small, *A q-analog for the Virasoro algebra*, Comm. Algebra **22** (1994), 3755–3774. MR **96b**:17016; 4. with J. Kuzmanovich, *Minimal prime ideals in enveloping algebras of Lie superalgebras*, Proc. Amer. Math. Soc. **124** (1996), 1693–1702. MR **96h**:16027; 5. with I. Musson and D. Passman, *Noetherian down-up algebras*, Proc. Amer. Math. Soc., to appear.

Statement: Promoting mathematical research should continue as the primary mission of the AMS. While mathematicians continue to solve centuries-old problems and mathematics finds new areas of application, much of the traditional support for research seems to be waning. Nowadays research is pursued at a diverse set of American institutions (where internal support for research is not always ideal), and the uncertainties of the job market present serious problems for young mathematicians. Mathematical research is also affected by perceptions of mathematics and mathematics education held by the public, scientists, and engineers.

The AMS needs Council members representing the diversity of the American research community to develop creative solutions to the problems facing the mathematical community. To improve the support for research, we need to educate not only the policymakers in Washington but also the administrators who make decisions that affect the creation of jobs and the provision of internal resources. The AMS should explore ways to create synergy among all parts of the mathematical community. Working together, different sectors of the research community can find the means to improve support for mathematical research.

Jonathan M. Rosenberg
Professor of Mathematics, University of Maryland.
Born: December 30, 1951, Chicago, Illinois.
Ph.D.: University of California, Berkeley, 1976.
AMS Committees: *Proceedings* Editorial Board, 1988–1991; Chair, Committee on Steele Prizes, 1997– ; Committee on the Profession, 1999– ; *Journal of the AMS* Editorial Committee (associate editor), 2000– .
Selected Addresses: Invited Address, Plymouth, June 1984; Organizer, Special Session on C^*-Algebras and Topology/Geometry, Plymouth, NH July 1984; Principal Speaker (with Stephan Stolz), DMV-Seminar on Metrics of Positive Scalar Curvature, Blaubeuren, Germany, June 1992; Special Session on C^*-Algebras: 1943–1993 (A 50-Year Celebration), San Antonio, January 1993; Special Session on Noncommutative Geometry and Applications, San Diego, January 1997; Minicourse, Joint Summer Research Conference on Algebraic K-Theory, Seattle, July 1997.

Additional Information: Among top ten in nation in Putnam Mathematical Competitions, 1970 and 1971; NSF Graduate Fellow, 1973–1976; Alfred P. Sloan Research Fellow, 1980–1984; Panel to Select NSF Postdoctoral Fellows in Mathematics, 1989–1992. ***Editorial Boards***: *K-Theory*, 1997– ; *Homology, Homotopy, and Applications*, 1998– .

Selected Publications: 1. with E. Gootman, *The structure of crossed product C^*-algebras: A proof of the generalized Effros-Hahn Conjecture*, Invent. Math. **52** (1979), 283–298. MR **80h**:46091; 2. *C^*-algebras, positive scalar curvature, and the Novikov Conjecture*, Publ. Math. Inst. Hautes Études Sci. **58** (1983), 197–212. MR **85g**:58083; 3. with S. Weinberger, *Higher G-signatures for Lipschitz manifolds*, K-Theory **7** (1993), 101–132. MR **94j**:58165; 4. *Algebraic K-Theory and Its Applications*, Graduate Texts in Mathematics, vol. 147, Springer-Verlag, New York, 1994. MR **95e**:19001; 5. with K. R. Coombes and R. L. Lipsman, *Multivariable Calculus and Mathematica. With Applications to Geometry and Physics*, Springer-Verlag–TELOS, New York, 1998. MR **99b**:26001.

Statement: The AMS is the world's largest and strongest organization for promoting mathematical research, as well as one of the world's premier mathematical publishers. We must make sure it continues to be successful in the promotion and dissemination of research, but to do so, we must adapt to changing times.

While mathematics plays an increasingly important role in all aspects of society, public appreciation for research mathematics as an enterprise, as well as general understanding of the mathematical profession, is remarkably low. Turning this situation around is a very difficult challenge for the AMS. If elected to the Council, I would work for modernization of mathematics education (to convince the general public that mathematics is a living subject), better recruitment and support of talented young people in mathematics, and improved public relations. The AMS has begun to work on all of these fronts, but much additional work is needed.

Claude L. Schochet
Professor of Mathematics, Wayne State University.
Born: August 5, 1944, Minneapolis, Minnesota.
Ph.D.: University of Chicago, 1969.

AMS Committees: Committee on Professional Ethics (COPE), 1994– (chair, 1995–2000); Committee on Procedures for the Committee on Professional Ethics (COPE), 1995.

Selected Addresses: London Mathematical Society Symposium on Operator Algebras, Durham, July 1981; Special Session on Operator Algebra and Operator Theory, Denver, January 1983; Summer Research Institute on Operator Theory/Operator Algebras and Applications, Durham, July 1988; Special Session on C^*-Algebras: 1943–1993 (A 50-Year Celebration), San Antonio, January 1993; Special Session on C^*-Algebras, Detroit, May 1997.

Additional Information: Wayne State University Board of Governors Faculty Recognition Award, 1983 and 1989. ***Member:*** European Mathematical Union, Israel Mathematical Union, London Mathematical Society, MAA.

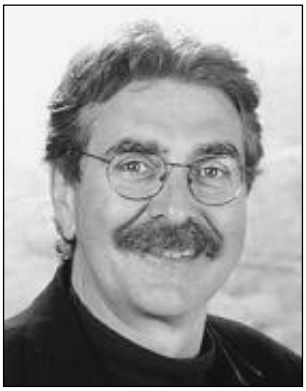
Selected Publications: 1. *Topological methods for C^*-algebras II: Geometric resolutions and the Künneth formula*, Pacific J. Math. **98** (1982), 443–458. MR **84g**:46105b; 2. with J. Rosenberg, *The Künneth theorem and the universal coefficient theorem for equivariant K-theory and KK-theory*, Mem. Amer. Math. Soc. **62** (1986), no. 348. MR **87k**:46147; 3. with J. Rosenberg, *The Künneth theorem and the universal coefficient theorem for Kasparov's generalized K-functor*, Duke Math. J. **55** (1987), 431–474. MR **88i**:46091; 4. with C. C. Moore, *Global Analysis on Foliated Spaces*, Math. Sci. Res. Inst. Publ., no. 9, Springer-Verlag, New York, 1988. MR **89h**:58184; 5. *The* UCT*, the Milnor sequence, and a canonical decomposition of the Kasparov groups*, K-Theory **10** (1996), 49–72. MR **99d**:46095.

Statement: It was once fashionable to view ourselves as a community of scholars. The ivory tower aspect of that world view is now generally obsolete, but what remains should inform and enunciate our actions. Strategies change, but values remain. "Business as usual" is not an acceptable strategy for the coming century.

Internally we must promote traditional research and develop new forms of interdisciplinary research. We must support each other—supply excellent teaching, help find jobs, make special efforts to be inclusive of women and minority members—and we must deal ethically with each other.

Externally we must recognize our obligation to the world outside of academic mathematics. It supplies our undergraduates, so we cannot simply ignore K–12 education. It supplies our funding, for which we provide the services of teaching and pure and applied research. Our community must build and maintain bridges to all users of mathematics (from computer science to sociology). These are hard to build and require frequent maintenance, but they are critical to our survival (witness the Rochester affair). I strongly support our national public relations efforts and would encourage off-the-record lobbying; I have learned from COPE that the most effective persuasion occurs in private.

Ronald J. Stern



Professor of Mathematics and Dean, School of Physical Sciences, University of California, Irvine.

Born: January 20, 1947, Chicago, Illinois.

Ph.D. University of California, Los Angeles, 1973.

AMS Committees: Committee on Far Western Sectional Meetings (Select Hour Speakers for), 1986–1987, and Western Section Program Committee, 1991–1992 (chair, 1992); *Proceedings* Editorial Committee, 1992–1996; Committee on the Profession, 1994– ; Task Force on Membership, 1998– ; AMS-SMM Joint Program Committee, Denton, May 1999; Committee on Publications, 1999– ; *Graduate Studies in Mathematics* Editorial Committee, 1999– .

Selected Addresses: MAA Invited Address, Eugene, August 1984. ***AMS Invited Addresses:*** Laramie, August 1985; Oaxaca, Mexico, 1997; Spitafield's Day Speaker, London Mathematical Society, Cambridge University, 1994; Invited Speaker, International Congress of Mathematicians, Berlin, 1998.

Additional Information: University of Utah Distinguished Teaching Award, 1987; Chair, Department of Mathematics, University of California, Irvine, 1990–1994; Secretary, Board of Trustees, MSRI, 1992–1996; President and Chair, Board of Governors, *Pacific Journal of Mathematics*, 1995– ; Dean, School of Physical Sciences, University of California, Irvine, 1998– .

Selected Publications: 1. with D. Galewski, *Classification of simplicial triangulations of topological manifolds*, Ann. of Math. **111** (1980), 1–34. MR **81f**:57012; 2. with R. Fintushel, *The blowup formula for Donaldson invariants*, Ann. of Math. **143** (1996), 529–546. MR **97i**:57036; 3. with R. Fintushel, *Rational blowdowns of smooth 4-manifolds,* J. Differential Geom. **46** (1997), 181–235. MR **98j**:57047; 4. with R. Fintushel, *Surfaces in 4-manifolds*, Math. Res. Lett. **4** (1997), 907–914. MR **98k**:57047; 5. with R. Fintushel, *Knots, links, and 4-manifolds*, Invent. Math. **134** (1998), 363–400.

Statement: Historically the primary mission of the AMS has been to encourage and publish mathematical research. The AMS has expanded its role to include a broad array of activities such as representing the mathematical research community to Congress and working together with other professional societies to publicize the importance of math and science in our daily and future lives.

The AMS can further expand its role by providing a meaningful and strong influence on the policies of U.S. funding agencies. Further, the AMS can facilitate discussions between math departments on matters concerning graduate training, undergraduate teaching, support for research, and the important role a math department plays within a university structure. With all these activities the AMS can provide strong leadership for the continued prosperity of

U.S. mathematics. I look forward to the opportunity to add another voice to the cacophony of an overly large council.

Lisa Traynor

Associate Professor, Mathematics Department, Bryn Mawr College.
Born: September 23, 1964, Ironwood, Michigan.
Ph.D.: State University of New York at Stony Brook, 1992.
Selected Addresses: ***AMS Special Sessions***: Symplectic Topology and Quantum Cohomology, Milwaukee, October 1997; Symplectic Geometry and Mechanics, Corvallis, April 1997; Symplectic Geometry and Topology, Urbana, March 1999; Midwest Geometry Conference, Lawrence, April 1997; Texas Topology and Geometry Conference, Lubbock, February 1999.
Additional Information: Alfred P. Sloan Doctoral Dissertation Fellowship, 1991–1992; MSRI Postdoc, 1992–1993, and Member, 1996–1997; NSF Postdoctoral Fellow, 1993–1997; Centre Emile Borel, Institut Henri Poincaré Member, Paris 1994; Isaac Newton Institute Member, Cambridge, fall 1994; Organizing Committee Member, Institute for Advanced Study/Park City Mathematics Institute Women's Program, 1996– ; Co-organizer (with Y. Eliashberg), Research Program for the Institute for Advanced Study/Park City Mathematics Institute on Symplectic Geometry and Topology, 1997. ***Member:*** AMS, AWM, MAA.
Selected Publications: 1. *Symplectic embedding trees for generalized camel spaces*, Duke Math. J. **72** (1993), 573–594. MR **95a**:58014; 2. *Symplectic homology via generating functions*, Geom. Funct. Anal. **4** (1994), 718–748. MR **96a**:58049; 3. *Symplectic packing constructions*, J. Differential Geom. **42** (1995), 411–429. MR **96k**:53046; 4. *Legendrian circular helix links*, Math. Proc. Cambridge Philos. Soc. **122** (1997), 301–314. MR **98f**:58085; 5. *A legendrian stratification of rational tangles*, J. Knot Theory Ramifications **7** (1998), 659–700.
Statement: If elected, I would work hard to research issues that come to the attention of the Council. I am particularly interested in issues related to science policy and education. In the process of forming my opinions, I would make efforts to communicate with people involved with mathematics at a variety of levels and employment situations. My motivation to serve the community in this way is my love of and dedication to mathematical research. I believe that excellence in research mathematics, in the application of mathematics to other disciplines, and in the teaching of mathematics are all interdependent and thus all need to be encouraged and supported.

William Yslas Velez

Professor of Mathematics, University Distinguished Professor, University of Arizona.
Born: January 15, 1947, Tucson, Arizona.
Ph.D.: University of Arizona, 1975.
AMS Committees: Committee on Committees, 1990–1995; Committee on Meetings and Conferences, 1993–1995.
Additional Information: President, Society for the Advancement of Chicanos and Native Americans in Science, 1994–1997; Director, Southwest Regional Institute in the Mathematical Sciences, 1994–1999; Organizing Committee, Second Joint Meeting of the AMS and the Sociedad Matematica Mexicana (SMM), Guanajuato, November/December 1995; President's Award for Excellence in Science, Mathematics and Engineering Mentoring, 1997; University Distinguished Professor, 1998– ; Council Delegate, Section on Mathematics to AAAS, 1998– ; Chair, Human Resources Advisory Committee, Mathematical Sciences Research Institute, Berkeley, 1999– ; Governor-at-Large for Minority Interests, MAA, 1999– .
Selected Publications: 1. with D. J. Madden, *Polynomials that represent quadratic residues at primitive roots*, Pacific J. Math. **98** (1982), 123–137. MR **83m**:12025; 2. with E. Jacobson, *Fields arithmetically equivalent to a radical extension of the rationals*, J. Number Theory **35** (1990), 227–246. MR **92b**:1108; 3. with James Bond and Tom Schlosser, Patent #5,495,497, Method and apparatus for suppressing interference from bandspread communication signals, February 27, 1996; 4. The integration of research and education, Notices Amer. Math. Soc. **83** (October 1996), 1142–1146; 5. with J. Watkins, The research mathematician as storyteller, *The Future of Mathematics Education at Research Universities*, Mathematical Sciences Research Institute, Berkeley, CA, 1996.
Statement: I sought a Ph.D. in mathematics because I was fascinated by the subject. When I began my career, I thought my entire life would be spent doing research in mathematics. However, since I am one of a very small number of Chicano mathematicians, I have had to redirect my energies in other directions, namely, at encouraging minority students to pursue mathematical studies. These efforts have their own rewards.

As a mathematician I have enjoyed participating in a variety of endeavors. I have created mathematics, I have applied mathematics to solve industrial problems, and I have used mathematics to motivate our children to pursue more quantitative studies. I believe that mathematicians have a rich story to tell. I also believe that we haven't done a very good job of telling this story, with the effect that students don't understand the great utility of our subject. As mathematicians we know that our research is behind many of the latest scientific advances. To mimic a recent commercial, our profession can say, "We don't make the products; we make them possible." Our children need to know this.

Nominating Committee

Curtis D. Bennett

Associate Professor, Department of Mathematics and Statistics, Bowling Green State University.

Born: July 26, 1963, Madison, Wisconsin.

Ph.D.: University of Chicago, 1990.

AMS Committees: Committee on the Profession, 1996–1998; AMS-MAA Committee on Teaching Assistants and Part-Time Instructors, 1998– .

Selected Addresses: Co-organizer and moderator, AMS Panel Discussion: The Job Market for Mathematics Ph.D.'s, San Diego, January 1997; Panelist, Project NExT Panel Discussion on Professional Development, Baltimore, January 1998; Special Session on Groups and Geometry, Manhattan, Kansas, March 1998; Invited Address, MAA Ohio Chapter, spring 1998; Conference on Moufang Polygons and (Twin) Buildings, Gent, 1999.

Additional Information: Founding Member and Editor, *Young Mathematicians' Network*, 1993–1996; Member, MAA Ohio Section Committee on Student Members, 1995–1997, 1999.

Selected Publications: 1. *Imaginary roots of a Kac-Moody Lie algebra whose reflections preserve root multiplicities*, J. Algebra **158** (1993), 244–267. MR **94g**:17043; 2. *Twin trees and λ_Λ-gons*, Trans. Amer. Math. Soc. **349** (1997), 2069–2084. MR **97h**:51009; 3. *Explicit free subgroups of Aut* $(R, \leq)$, Proc. Amer. Math. Soc. **125** (1997), 1305–1308. MR **97g**:06020; 4. with M. Abramson, *Enumerating $A_3(2)$ blueprints, and an application*, Experiment. Math. **7** (1998), 391–398; 5. Co-editor (with A. Crannell), *Starting Our Careers: A Collection of Essays and Advice on Professional Development from the Young Mathematicians' Network*, American Mathematical Society, Providence, RI, 1999.

Statement: In addition to choosing qualified candidates, the AMS needs to be certain that all of its membership has representation on the Council and other committees. In particular, we need to make an effort to be sure that nominations are made from traditionally underrepresented groups such as women, minorities, mathematicians from smaller schools, junior mathematicians, and mathematicians from industry. As a member of the Nominating Committee, I will endeavor to see that nominees are qualified and represent the diversity of the community.

Ruth M. Charney

Professor, Ohio State University.

Born: December 30, 1950, New York, New York.

Ph.D.: Princeton University, 1977.

AMS Offices: Member at Large of the Council, 1992–1995.

AMS Committees: Committee on Eastern Sectional Meetings (Select Hour Speakers for), 1988–1989 (chair, 1989); Committee on the Profession, 1993–1995; Centennial Fellowship Committee, 1995–1997.

Selected Addresses: AMS Invited Address, Anaheim, January 1985; Conference on Recent Developments in Topology, Princeton, October 1995; Special Session on Geometric Group Theory, Baton Rouge, April 1996; Special Session on Geometric Topology and Geometric Group Theory, Milwaukee, October 1997; Conference on Geometric Group Theory, Canberra, July 1996.

Additional Information: NSF Postdoctoral Fellowship, 1979–1980; AWM Executive Committee, 1990–1993; MSRI Board of Trustees, 1993–1995; AWM Schafer Prize Committee, 1994–1995.

Selected Publications: 1. *Homology stability for GL_n of a Dedekind domain*, Invent. Math. **56** (1980), 1–17. MR **81h**:18010; 2. with R. Lee, *Cohomology of the Satake compactification*, Topology **22** (1983), 384–423. MR **85k**:32061; 3. *Artin groups of finite type are biautomatic*, Math. Ann. **292** (1992), 671–683. MR **93c**:20067; 4. with M. Davis, *The $K(\pi, 1)$-problem for hyperplane complements associated to infinite reflection groups*, J. Amer. Math. Soc. **8** (1995), 597–627. MR **95i**:52011; 5. with M. Davis, *Singular metrics of nonpositive curvature on branched covers of Riemannian manifolds*, Amer. J. Math. **115** (1993), 929–1009. MR **94j**:53053.

Ramesh A. Gangolli

Professor of Mathematics, University of Washington.

Born: February 26, 1935, Bangalore, India.

Ph.D.: Massachusetts Institute of Technology, 1961.

AMS Offices: Board of Trustees, 1985–1989 (secretary, 1986; chair, 1988).

AMS Committees: Committee to Select Hour Speakers for Far Western Sectional Meetings, 1977, 1984–1985; Committee on Investment, Board of Trustees, 1985–1989; Committee on Corporate Relations, Board of Trustees, 1985–1996 (chair); Committee on Institutional Membership, Board of Trustees, 1987–1997; Agenda and Budget Committee, Board of Trustees (ex officio), 1988; Committee on Long-Range Planning, Board of Trustees (ex officio), 1988; Committee on the Publication Program, Board of Trustees, 1988– (chair, 1991–1992); Ad Hoc Committee on AMS Publications in Applied Mathematics, 1989; Committee on Education, 1991–1993 (chair); AMS-MAA Committee on Cooperation, 1991–1995.

Selected Addresses: Various invited talks at meetings/conferences of the American Mathematical Society.

Additional Information: ***Positions held***: Instructor, Department of Mathematics, Massachusetts Institute of Technology, 1961–1962; University of Washington, Department of Mathematics: assistant professor, 1962–1965; associate professor, 1965–1967; professor, 1967– ; chair, 1981–1985, 1991–1993; professor emeritus, 1997– . ***Awards, honors, and visiting positions***: Numerous undergraduate awards, University of Bombay, 1950–1955; Cambridge Society of India Scholar, 1955–1957; Paul Levy Prize, Academy of Sciences, France, 1966; Member, Institute for Advanced Study, Princeton, 1966–1967; Alfred P. Sloan Fellow, 1966–1968; Visiting positions at various universities in the U. S., Canada, Europe, India, and Australia. ***Invited talks and colloquia***:

Various invited talks at meetings/conferences of the Australian Mathematical Society, Canadian Mathematical Congress, Indian Mathematical Society, Institute for Mathematical Statistics, and the Oberwolfach Institute; colloquia at numerous universities in the U. S. and abroad. ***Professional and university service***: Referee, National Science Foundation, 1965– ; Associate Editor, *Journal of the Indian Mathematical Society*, 1973–1983; Member, Advisory Panel for the Mathematical Sciences, National Science Foundation, 1982–1985 (chair, 1984–1985); Associate Editor, *Pacific Journal of Mathematics*, 1983–1989; National Research Council: MS2000 Committee, 1988–1990; Mathematical Sciences Education Board, 1990–1994; Committee on Undergraduate Science Education, 1993– ; Member, Commission on Curriculum Standards, National Council of Teachers of Mathematics, 1994–1995; Chair, Conference Board for the Mathematical Sciences, 1994–1996; Member, TIMSS Technical Review Panel, 1999– ; Numerous other university, NSF, and NRC committees.

Selected Publications: 1. *On the construction of certain diffusions on a differentiable manifold*, Z. Wahrsch. Verw. Gebiete **2** (1964), 406–419. MR **29** #2870; 2. *Isotropic infinitely divisible measures on symmetric spaces*, Acta Math. **111** (1964), 213–246. MR **28** #4557; 3. with D. Ylvisaker, *Discrete Probability,* Harcourt Brace Jovanovich, New York, 1967; 4. *Asymptotic behaviour of spectra of compact quotients of certain symmetric spaces*, Acta Math. **121** (1968), 151–192. MR **39** #360; 5. with V. S. Varadarajan, *Harmonic Analysis of Spherical Functions on Real Reductive Groups*, Ergebnisse der Mathematik und ihrer Grenzgebiete, vol. 101, Springer-Verlag, Berlin, New York, 1988. MR **89m**:22015.

Frank Morgan

Meenan Third Century Professor of Mathematics, Williams College.

Ph.D.: Princeton University, 1977.

AMS Offices: Member at Large of the Council, 1994–1997.

AMS Committees: AMS-MAA-SIAM Morgan Prize Committee for Research in Mathematics by an Undergraduate Student, 1995–1997.

Selected Addresses: Joint AMS-MAA Invited Address on Compound Soap Bubbles, Shortest Networks, and Minimal Surfaces, San Francisco, January 1991; about 40 other talks a year.

Selected Publications: 1. *Geometric Measure Theory. A Beginner's Guide*, Second edition, Academic Press, Inc., San Diego, CA, 1995. MR **96c**:49001; 2. *Calculus Lite*, Second edition, A. K. Peters, 1997; 3. with G. Lawlor, *Curvy slicing proves that triple junctions locally minimize area*, J. Differential Geom. **44** (1996), 514–528. MR **98a**:53012; 4. *The hexagonal honeycomb conjecture*, Trans. Amer. Math. Soc. **351** (1999), 1753–1763; 5. *The Math Chat Book*, MAA, 1999, to appear (see `www.maa.org`).

Statement: The mathematics community is a wonderfully diverse and creative body, and I hope we can support and involve more folks in the work and the activities of our American Mathematical Society.

Donald St. P. Richards

Professor, University of Virginia.

Born: April 4, 1955, Mandeville, Jamaica.

Ph.D.: University of the West Indies, 1978.

AMS Committees: Southeastern Section Program Committee, 1992–1994 (chair, 1993).

Selected Addresses: Invited Address, Tampa, March 1991; Special Session on Harmonic Analysis and Representation Theory, Cincinnati, January 1994; Special Session on Representation Theory, Orlando, January 1996; Special Session on Algebraic Methods in Statistics, Montreal, September 1997; Special Session on Probability Inequalities, Atlanta, October 1998.

Additional Information: Member, NAS/NRC Committee on Doctoral and Postdoctoral Study in the United States, 1990–1991; Member, Board on Mathematical Sciences, 1993–1999; Elected Fellow, Institute of Mathematical Statistics, 1999. ***Member:*** AMS, ASA, IMS.

Selected Publications: 1. with K. I. Gross, *Special functions of matrix argument. I. Algebraic induction, zonal polynomials and hypergeometric functions*, Trans. Amer. Math. Soc. **301** (1987), 781–811. MR **88m**:22018; 2. with R. A. Askey, Selberg's second beta integral and an integral of Mehta, *Probability, Statistics and Mathematics: Papers in Honor of S. Karlin* (T. W. Anderson et al., eds.), Academic Press, New York, 1989, pp. 27–39 . MR **91f**:33006; 3. Editor, *Hypergeometric Functions on Domains of Positivity, Jack Polynomials, and Applications*, Contemp. Math., vol. 138, American Mathematical Society, Providence, RI, 1992. MR **93h**:33001; 4. with K. I. Gross, *Total positivity, finite reflection groups, and a formula of Harish-Chandra*, J. Approx. Theory **82** (1995), 60–87. MR **96i**:22022; 5. with H. Ding and K. I. Gross, *Ramanujan's master theorem for symmetric cones*, Pacific J. Math. **175** (1996), 447–490. MR **98b**:43019.

Editorial Boards Committee

Palle E. T. Jorgensen

Professor of Mathematics, University of Iowa.

Born: October 8, 1947, Copenhagen, Denmark.

Ph.D.: Aarhus University, 1973.

AMS Committees: *Proceedings* Editorial Committee, 1988–1998.

Selected Addresses: I have been an invited speaker in AMS Special Session lectures at least once a year for the last ten years, and I have been a co-organizer of several Special Sessions. In addition, I have been co-organizer of two CBMS conferences and of several NSF-sponsored conferences.

Additional Information: NSF Mathematical Sciences Postdoctoral Research Selection Panel, 1993–1997; Editor, *Acta Applicanda Mathematicae*; author of two research monographs in operator theory, mathematical physics, and representation theory.

Selected Publications: 1. with O. Bratteli, *Isometries, shifts, Cuntz algebras and multiresolution wavelet analysis of scale N*, Integral Equations Operator Theory **28** (1997), 382–443; 2. with S. Pedersen, *Dense analytic subspaces in fractal L^2-spaces*, J. Anal. Math. **75** (1998), 185–228; 3. *Harmonic analysis of fractal processes via C^*-algebras*, Math. Nachr. **200** (1999), 77–117; 4. with O. Bratteli, *Iterated function systems and permutation representations of the Cuntz algebra*, Mem. Amer. Math. Soc. **139** (May 1999); 5. with O. Bratteli, A. Kishimoto, and R. F. Werner, *Pure states on O_d*, J. Operator Theory, to appear.

Statement: The mathematics research journals are the lifeblood of our profession, and with an increasing financial pressure on library budgets the role of the American Mathematical Society grows proportionally. I have served on the library committees of both my department and my university and have learned that there are no magic formulas for solving the difficult problem of availability of journals to researchers. But awareness and pressure helps, and the AMS has done a great job in producing high-quality journals and monographs at moderate prices. It is my ambition to help move this process forward.

Gregory F. Lawler

Professor of Mathematics, Duke University.

Born: July 14, 1955, Alexandria, Virginia.

Ph.D.: Princeton University, 1979.

Selected Addresses: Random Walks and Discrete Potential Theory, Cortona, June 1997; Minicourse, ETH, Zurich, May 1998; Random Walks Workshop, Budapest, July 1998; Mathematical Physics of Polymers and Percolation, The Fields Institute, Toronto, August 1998; Invited Address, Gainesville, March 1999.

Additional Information: Alfred P. Sloan Fellow, 1986–1990; Fellow, IMS, 1991; Cofounder, *Electronic Journal of Probability*.

Selected Publications: 1. with A. Sokal, *Bounds on the L_2 spectrum for Markov chains and Markov processes: A generalization of Cheeger's inequality*, Trans. Amer. Math. Soc. **309** (1988), 557–580; 2. *Intersections of random walks*, Birkhäuser Boston, Inc., Boston, MA, 1991. MR **92f**:60122; 3. *Subdiffusive fluctuations for internal diffusion limited aggregation*, Ann. Probab. **23** (1995), 71–86. MR **96c**:60086; 4. *The dimension of the frontier of planar Brownian motion*, Electron. Comm. Probab. **1** (1996), 29–47. MR **97g**:60110; 5. *Strict concavity of the intersection exponent for Brownian motion in two and three dimensions*, Math. Phys. Electron. J. **4** (1998), no. 5.

Statement: The best way for the AMS to counter the high prices of journals is to continue to produce high-quality, low-cost journals, both print and electronic, and to strive to make these journals among the most prestigious in the mathematics community.

Roger Wiegand

Professor, Department of Mathematics and Statistics, University of Nebraska-Lincoln.

Born: July 22, 1943, Zanesville, Ohio.

Ph.D.: University of Washington, 1967.

AMS Committees: Ad Hoc Committee on Preparing Future Faculty, 1999.

Selected Addresses: Special Session on Commutative Algebra, Hartford, March 1995; Special Session on Commutative Algebra and Algebraic Coding Theory, Guanajuato, November 1995; AMS-MAA Invited Address, Orlando, January 1996; Special Session on Commutative Algebra, Iowa City, March 1996; Special Session on Commutative Algebra, Baltimore, January 1998.

Selected Publications: 1. with R. Guralnick, *Galois groups and the multiplicative structure of field extensions*, Trans. Amer. Math. Soc. **331** (1992), 563–584. MR **93c**:12004; 2. with C. Huneke, *Tensor products of modules and the rigidity of* Tor, Math. Ann. **299** (1994), 449–476. MR **95m**:13008; 3. with R. Guralnick, D. Jaffe, and W. Raskind, *On the Picard group: Torsion and the kernel induced by a faithfully flat map*, J. Algebra **183** (1996), 420–455. MR **97c**:14002; 4. *Local rings of finite Cohen-Macaulay type*, J. Algebra **203** (1998), 156–168. MR **99c**:13025; 5. with C. Rotthaus and D. Weston, *Indecomposable Gorenstein modules of odd rank*, J. Algebra **214** (1999), 122–127.