Biographies of Candidates 2000

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.

Vice President

Ingrid Daubechies

Professor of Mathematics, Princeton University.

Born: August 17, 1954, Houthalen, Belgium.

Ph.D.: Vrije Universiteit, Brussels, Belgium, 1980.

AMS Committees: Committee on Committees, 1993–1995; Short Course Subcommittee, 1993–1996; Steele Prize Committee, 1995–1997 (chair, 1995–1997); Nominating Committee, 1995–1997; Electronic Research Announcements Editorial Board, 1995–1997; AMS-Benelux Joint Meeting Committee, 1995–1997; Program Committee for National Meetings, 1995–1998; *Journal of the American Mathematical Society*, 1998– (associate editor, 1998).

Selected Addresses: Principal Speaker, CBMS Conference, Lowell, 1990; Plenary Speaker, SIAM, Chicago, 1990; MAA Invited Address, Baltimore, 1992; Plenary Address, ICM, Zurich, 1994; Plenary Address, ICIAM, Hamburg, Germany, 1995.

Additional Information: Elected Member, American Academy of Arts and Sciences, 1993– ; AMS Steele Prize for Exposition, 1994; AMS Ruth Lyttle Satter Prize, 1997; Elected Member, National Academy of Sciences, 1998– ; Fellow, Institute of Electrical and Electron Engineers, Inc., 1998; Elected Foreign Member, Royal Netherlands Academy of Arts and Sciences, 1999– ; Doctor Honoris Causa, Université Libre de Bruxelles, February 2000; National Academy of Sciences Medal in Mathematics, 2000.

Selected Publications: 1. with J. R. Klauder, Constructing measures for path integrals, *J. Math. Phys.* **23** (1982), 1806–1822. MR **85e**:81045; 2. with E. H. Lieb, One-electron relativistic molecules with Coulomb interaction, *Comm. Math. Phys.* **90** (1983), 497–510. MR **85j**:81007; 3. Orthonormal bases of compactly supported wavelets, *Comm. Pure Appl. Math.* **41** (1988), 909–996. MR **90m**:42039; 4. The wavelet transform, time-frequency localization and signal analysis, *IEEE Trans. Inform. Theory* **36** (1990), 961–1005. MR **91e**:42038; 5. *Ten Lectures on Wavelets*, CBMS-NSF Regional Conf. Ser. in Appl. Math., vol. 61, SIAM, Philadelphia, PA, 1992. MR **93e**:42045.

Statement: The American Mathematical Society has traditionally supported mathematical research and is now also taking an active role in various issues concerning the mathematical community, such as diversity, funding, and education. At a time when many disciplines outside mathematics are in increasing need of appropriate mathematical concepts and models, there is a great opportunity for mathematical research to have impact in interdisciplinary research. As vice president of the AMS, I would try to contribute both to the traditional roles of the AMS and to the building of interdisciplinary bridges.

M. Susan Montgomery

Professor of Mathematics, University of Southern California.
Born: April 2, 1943, Lansing, Michigan.
Ph.D.: University of Chicago, 1969.
AMS Offices: Member at Large of the Council, 1981–1984; Board of Trustees, 1986–1995 (chair, 1989, 1994).
AMS Committees: Subcommittee to Write Rules for CAFTES, 1978–1979; *Notices* Editorial Committee, 1979–1982; Selection Committee for Research Fellowship, 1982–1984 (chair, 1983–1984); *Mathematical Surveys and Monographs* Editorial Committee, 1983–1990 (chair, 1989–1990); AMS-MAA Joint Program Committee for the AMS Centennial, 1988; Committee on Fellowship Policy, 1989 (chair); AMS-MAA Committee on Cooperation, 1991–1995; Policy Committee on Meetings and Conferences, 1992–1993; Committee on Copyright Policy, 1992–1994 (chair); *Proceedings* Editorial Committee, 1992–1995 (coordinating editor, Algebra and Number Theory); Committee on Investment, 1993–1995; Search Committee for Executive Director, 1994; Policy Committee on Publications, 1994–1995 and 1997–1999 (chair, 1997–1998); AMS-MAA Joint Program Committee for the San Diego Meeting, 1996; Program Committee, Joint AMS-BENELUX Meeting, Antwerp, 1996; AMS-MAA Joint Program Committee for the Baltimore Meeting, 1997.
Selected Addresses: AMS Invited Address, Louisville, January 1984; Principal Lecturer, CBMS Conference on Hopf Algebras and Their Actions on Rings, Chicago, August 1992; Invited Address, Joint Meeting of the AMS and the Israel Mathematical Union, Jerusalem, May 1995; Invited Address, Sociedad Matematica Mexicana, Aguas Calientes, September 1997; Survey Lecturer, AMS von Neumann Symposium on Arithmetic Fundamental Groups and Noncommutative Algebra, MSRI, August 1999.
Additional Information: Guggenheim Fellowship, 1984–1985; Chair, Organizing Committee, AMS-IMS-SIAM Summer Research Conference on Group Actions on Rings, Brunswick, Maine, 1984; NSF-DMS Advisory Committee, 1986–1989; *Journal of Algebra* Editorial Board, 1988–2000; Board on Mathematical Sciences, NRC, 1995–1998 (Executive Committee, 1997–1998); Organizing Committee, MSRI Year on Noncommutative Algebra, 1999–2000; Chair, Organizing Committee, MSRI Workshop on Hopf Algebras, 1999. Member: AMS, AWM, LMS.
Selected Publications: 1. with L. W. Small, Fixed rings of Noetherian rings, *Bull. London Math. Soc.* **13** (1981), 33–38. MR **82a**:16033; 2. with R. J. Blattner and M. Cohen, Crossed products and inner actions of Hopf algebras, *Trans. Amer. Math. Soc.* **298** (1986), 671–711. MR **87k**:16012; 3. *Hopf algebras and their actions on rings*, CBMS Regional Conf. Ser. in Math., vol. 82, Amer. Math. Soc., Providence, RI, 1993. MR **94i**:16019; 4. with R. Guralnick, On invertible bimodules and automorphisms of noncommutative rings, *Trans. Amer. Math. Soc.* **341** (1994), 917–937. MR **94d**:16027; 5. with H.-J. Schneider, Prime ideals in Hopf Galois extensions, *Israel J. Math.* **112** (1999), 187–235.
Statement: The basic mission of the AMS is to foster research and scholarship in mathematics. Although deeply committed to research, I support the recent broadening of the AMS's mission to include activities related to education, to the mathematical profession, and to outreach to the scientific community and to the general public—in the long run these activities are vital to the future of research. I am particularly concerned about two issues. The first is the position of young mathematicians. Although the academic job market has improved somewhat, it is still not very good. We should make our students more aware of other interesting options, but we might also be able to make the academic job market easier to deal with by some united efforts. The coordinated reply date for postdoctoral positions, agreed to by many departments for the last two years, is a good first step. The second issue is the low representation of minorities and women on our research faculties; the AMS should take an active stance in trying to improve this situation.

Trustee

John B. Conway

Professor and Chair, Department of Mathematics, University of Tennessee, Knoxville.
Born: September 22, 1939, New Orleans, Louisiana.
Ph.D.: Louisiana State University, 1965.
AMS Offices: Member at Large of the Council, 1996– .
AMS Committees: *Proceedings* Editorial Committee, 1985–1988 (associate editor); Policy Review Committee for Science Policy, 1996; Committee on Publications, 1996–1998; Executive Committee of the Council, 1997– ; Nominating Committee for the Executive Committee and Board of Trustees, 1998– ; Committee on Long-Range Planning, 1998–1999 (chair, 1999); Committee to Review the AMS Book Program, 1999; Agenda and Budget Committee, 2000– .
Selected Addresses: Principal Speaker (four lectures), NATO Conference on Operators and Function Theory, University of Lancaster, UK, 1984; Invited Lecturer, AMS Summer Research Institute on Operator Theory/Operator Algebras and Applications, Durham, July 1988; Principal Speaker (two lectures), Southeastern Analysis Meeting, Charlotte, 1991.
Additional Information: Supervised 19 Ph.D. students, 1975–2000; Chair, Department of Mathematics, University of Tennessee, Knoxville, 1990– .
Selected Publications: 1. *Functions of One Complex Variable*, Grad. Texts in Math., vol. 11, Springer-Verlag, New York-Heidelberg, 1973. MR **56** #5843; 2. with R. F. Olin, A functional calculus for subnormal operators, II. *Mem. Amer. Math. Soc.* **10** (1977). MR **55** #8864; 3. with B. B. Morrel, Roots and logarithms of bounded operators on a Hilbert space, *J. Funct. Anal.* **70** (1987), 171–193. MR

87m:47044; 4. *The Theory of Subnormal Operators*, Math. Surveys Monogr., vol. 36, Amer. Math. Soc., Providence, RI, 1991. MR **92h**:47026; 5. *A Course in Operator Theory*, Grad. Stud. Math., vol. 21, Amer. Math. Soc., Providence, RI, 1999.

Statement: Perhaps our perspective is skewed by being so involved in a period of rapid change, but the world, society, and our profession seem to be in the midst of a period of dramatic flux. Few institutions are capable of remaining fixed during such times, and even fewer should try to remain constant. The American Mathematical Society has undergone considerable change in the past several years from being solely concerned with research to being involved with education, publishing, and Washington politics. Given that our professional lives demand so much more of us than research, this is a beneficial and salutary development. If elected to the Board of Trustees, I will work to encourage the Society to remain in tune with our needs as mathematicians while ensuring that its fiscal affairs are managed so as to make this feasible.

Douglas A. Lind

Professor of Mathematics, University of Washington.

Born: August 11, 1946.

Ph.D.: Stanford University, 1973.

AMS Committees: Centennial Fellowships Committee, 1991–1993; AMS-MAA Joint Program Committee for the Seattle MathFest, 1995–1996; Electronic Research Announcements Committee, 1995–1999; Task Force on Excellence in Mathematics Scholarship, 1995–2000; *Bulletin* Editorial Committee, 1999– (associate editor, Research-Expository Surveys).

Selected Addresses: Invited Address, Computers in Mathematics Lecture Series, IBM, Yorktown Heights, 1988; Invited Speaker, Special Session on the Geometry of Algebraic Numbers, Canadian Mathematical Society, Vancouver, 1989; Invited Principal Speaker, Conference on Ergodic Theory and Dynamics, Technical University of Delft, Holland, 1994; Invited Speaker, AMS Special Session on Interactions between Ergodic Theory and Number Theory, San Diego, January 1997; Invited Speaker, Warwick Symposium on the Ergodic Theory of $\mathbb{Z}^d$-Actions, University of Warwick, 2000.

Additional Information: Vice Chair, Board of Trustees, Mathematical Sciences Research Institute, Berkeley, 1989–1995; Organizing Committee, Program in Symbolic Dynamics, Mathematical Sciences Research Institute, 1992; Professeur Invité, Université Aix-Marseilles, 1993; Chair, Department of Mathematics, University of Washington, 1993–1998; Member: Mathematics Education Reform Task Force, 1993–1998; Coorganizer, Conference on Number Theory and Dynamics, CIRM, Luminy, France, 1995; Coorganizer, Symposium on the Riemann Hypothesis, University of Washington, Seattle, 1997; Chair, Organizing Committee, AMS Conference on Leadership in Doctoral Mathematics Departments, Bloomington, 1999; Chair, Committee of Academic Sponsors, Mathematical Sciences Research Institute, 1999–2002, and ex officio member of the Board of Trustees.

Selected Publications: 1. The entropies of topological Markov shifts and a related class of algebraic integers, *Ergodic Theory Dynam. Systems* **4** (1984), 283–300. MR **86c**:58092; 2. with K. Schmidt and T. Ward, Mahler measure and entropy for commuting automorphisms of compact groups, *Invent. Math.* **101** (1990), 593–629. MR **92j**:22013; 3. with B. Marcus, *An Introduction to Symbolic Dynamics and Coding*, Cambridge University Press, Cambridge, 1995. MR **97a**:58050; 4. with M. Boyle, Expansive subdynamics, *Trans. Amer. Math. Soc.* **349** (1997), 55–102. MR **97d**:58115; 5. with K. Schmidt, Homoclinic points of algebraic $\mathbb{Z}^d$-actions, *J. Amer. Math. Soc.* **12** (1999), 953–980. MR **2000d**:37002.

Statement: In addition to its fundamental role of supporting research in the mathematical sciences, the AMS has other equally serious and related obligations. These include publishing high-quality and cost-effective journals and books, strong advocacy for mathematics in Congress and federal agencies, continued efforts to publicize the mathematical sciences, promoting the diversity of our profession, and supporting broader graduate training.

Technology and the Internet are transforming our discipline. How will we communicate, publish, and teach in the years ahead? What economic models for the AMS can succeed? I believe this technology has vast potential but also dangers. My experience with and enthusiasm for technology can help guide decisions by the AMS.

Being a member of the AMS Task Force on Excellence has convinced me of the vital importance of departmental leadership. How many deans believe that mathematics is a model for a well-run and effective department that others should emulate? As the task force learned, some but not many. The AMS can play a stronger role here. Examples include annual AMS workshops for new and recent chairs, the recent AMS Leadership Conference for doctoral departments (both of which I helped run), and starting a leadership exchange program between departments.

Member at Large of the Council

Walter L. Craig

Professor of Mathematics, Brown University.

Born: November 28, 1953, State College, Pennsylvania.

Ph.D.: Courant Institute, 1981.

Selected Addresses: Plenary Address, *New York Journal of Mathematics* meeting, SUNY-Albany, June 1997; Invited Talk, IUTAM Symposium on Three-Dimensional Aspects of Air-Sea Interaction, Nice, France, May 1998; Workshop on Hamiltonian Mechanics and Small Divisors in PDE, International Centre for Mathematical Sciences, Edinburgh, Scotland, April 23–June 4, 1999; AMS Special Session on Geometric Properties of Nonlinear

Elliptic PDEs, Providence, October 1999; AMS Invited Address, Lowell, April 2000.
Additional Information: Awards: Alfred P. Sloan Fellowship, 1988; NSF Presidential Young Investigator, 1988–1993. Other positions: Bateman Instructor, California Institute of Technology, 1981–1983; Bantrell Fellow, California Institute of Technology, 1983–1984; Assistant Professor, Stanford University, 1984–1988; Editorial Board, *SIAM Journal of Mathematical Analysis*, 1998– ; Member: AMS, LMS.
Selected Publications: 1. with C. E. Wayne, Newton's method and periodic solutions of nonlinear wave equations, *Comm. Pure Appl. Math.* **46** (1993), 1409–1498. MR **94m**:35023; 2. with T. Kappeler and W. Strauss, Microlocal dispersive smoothing for the Schrödinger equation, *Comm. Pure Appl. Math.* **48** (1995), 769–860. MR **96m**:35057; 3. KAM theory in infinite dimensions, *Dynamical Systems and Probabilistic Methods in Partial Differential Equations* (Berkeley, CA, 1994), Lectures in Appl. Math., vol. 31, Amer. Math. Soc., Providence, RI, 1996, pp. 31–46. MR **96i**:58162; 4. *Problèmes de petits diviseurs dans les équations aux dérivées partielles*, Panor. Synthèses, Soc. Math. France, 2000, to appear; 5. with D. Nicholls, Traveling two and three dimensional capillary gravity waves, *SIAM J. Math. Anal.* (2000), to appear.
Statement: The American Mathematical Society, along with the other mathematics professional organizations, has the role of promoting mathematics and the profession of mathematician in our society. A vigorous and diverse mathematical sciences establishment is very important for the flourishing of the physical and biological sciences, for the education of a scientifically literate population in our increasingly technological society, and the beauty of mathematics, which is a cultural goal in its own right.

It is very important for the AMS to represent our diverse community of mathematicians to the public, to the government, and to the private sector. We are currently facing a number of big questions over the future of our profession, the availability of postdoctoral research opportunities for young Ph.D.'s, the funding of graduate students, the demographics of tenure-track or permanent university positions, competitive professional salary scales, and enlarging the base of nonacademic or nontraditional employment opportunities for mathematics degree holders.

The AMS can take a leading role in sponsoring an open discussion of these issues among the mathematics community. As a member of the Council, I would work to ensure that the AMS takes a proactive role in the future of our profession.

Keith J. Devlin
Dean of Science, Saint Mary's College of California, and Senior Researcher, Center for the Study of Language and Information, Stanford University.
Ph.D.: University of Bristol, UK, 1971.
AMS Committees: Committee on Electronic Products and Services, 1992–1994.
Selected Addresses: Plenary Speaker, National Council of Supervisors of Mathematics, Annual Meeting, Washington, DC, 1998; Public Lecture, Smithsonian Institution, Smithsonian Lecture Series, 1998; Plenary Speaker, Presidential Awards for Excellence in Mathematics and Science Teaching, Washington, DC, 1998; Invited Public Presentation, Project Kaleidoscope 10th Anniversary Celebration, National Building Museum, Washington, DC, 1999; Plenary Speaker, Millennium 2000 Mathematics Festival, Melbourne, Australia, 2000.

Additional Information: Editor: "Computers and Mathematics" column, *Notices of the American Mathematical Society*, 1991–1994; *Focus*, 1991–1997. Fellow, American Association for the Advancement of Science, 1999; Member, Mathematical Sciences Education Board, 1999; Educational software: *Electronic Companion to Calculus* (CD-ROM plus workbook), Cogito Learning Media, Inc., 1997. Television series: *Life by the Numbers*, PBS television series and accompanying book, 1998.
Selected Publications: 1. *Constructibility*, Perspect. Math. Logic, Springer-Verlag, Berlin-New York, 1984. MR **85k**:03001; 2. *Logic and Information*, Cambridge University Press, Cambridge, 1991. MR **93c**:68094 (American Association of Publishers "Most Outstanding Book in Computer Science and Data Processing for 1991"); 3. *The Joy of Sets: Fundamentals of Contemporary Set Theory*, second edition, Undergrad. Texts Math., Springer-Verlag, New York, 1993. MR **94e**:03001; 4. *Mathematics: The Science of Patterns. The Search for Order in Life, Mind, and the Universe*, Scientific American Library, New York, 1994. MR **95m**:00003; 5. *Mathematics: The New Golden Age*, second edition, Columbia University Press, New York, 1999. MR **93m**:00001a.
Statement: The first twenty years of my mathematical career were fairly typical. I did research, wrote papers, gave and attended research colloquia, and taught at the graduate and undergraduate level. In common with most of my colleagues at the time, I regarded that list as ordered by decreasing importance. If I were coming up through the ranks today, I would rank them all equally. Although I continue to do and publish research, since the mid-1980s my research focus has been on applications of mathematics to problems in information management. At the same time, my more mathematical interests have focused on educational issues, particularly public education. I believe that it is of crucial importance, both to the future health of mathematics as a funded activity and to the educational environment of our future students, that the mathematics community does everything it can to inform the public about mathematics—its true nature and importance, as well as progress in the field—and to change the largely negative attitude toward mathematics held by so many. This requires that we make use of television, radio, newspapers, magazines, and public speaking engagements at schools, Rotary clubs, etc., to spread our particular gospel.

Irene Fonseca

Professor, Department of Mathematical Sciences, Carnegie Mellon University, and Director, Center for Nonlinear Analysis.

Born: July 10, 1956, Lisbon, Portugal.

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

Selected Addresses: SIAM Conference on Emerging Issues in Mathematics and Computation from the Materials Sciences, Pittsburgh, April 1994; European Conference on Elliptic and Parabolic Problems, Pont-a-Moussons, France, June 1994; Motion by Mean Curvature and Related Topics, Trento, Italy, June 27–July 2, 1994; Eurhomogeneization, Nice, France, June 1995; Calculus of Variations and Nonlinear Elasticity, Cortona, Italy, June 1995; International Conference on Applied Analysis, Lisbon, Portugal, February 26–March 1, 1997; Mathematical Continuum Mechanics, Oberwolfach, Germany, June 1997; Second Euroconference and International Symposium on Material Instabilities, Aristotle University of Thessaloniki, Greece, August 31–September 5, 1997; AMS Invited Address, Atlanta, October 1997; Calculus of Variations, Oberwolfach, Germany, July 1998; Invited Address, SIAM Annual Meeting, University of Toronto, July 1998; Society for Natural Philosophy, Carnegie Mellon University, October 1998; Fourth Mississippi State Conference on Differential Equations and Computational Simulations, May 1999; Shape Optimization and Related Topics, CIRM, Luminy, Marseille, June 1999; Nonlinear Partial Differential Equations and Applications, Lisbon, Portugal, October 1999; Differential Equations and Calculus of Variations, Isola d'Elba, Italy, October 1999; Phase Transitions and Interfaces in Evolution Equations: Analysis, Control, and Approximation, Santa Margherita Ligure, Italy, February 2000.

Additional Information: Awards: Fulbright Fellowship, 1981–1985; Gulbenkian Fellowship, 1981–1985; Grande Oficial da Ordem Militar de Sant'Iago da Espada, Portugal, 1997. Editorial Boards: Managing Editor, ESAIM; *Control, Optimisation and Calculus of Variations* (European Ser. Appl. Indust. Math., Soc. Math. Appl. Indust., Paris). Selected Organizing Committees of Conferences, Workshops, and Minisymposia: SIAM Meeting on Mathematical/Computational Aspects of Materials Science, Philadelphia, May 1997; AMS Special Session on Recent Developments in Partial Differential Equations, Calculus of Variations and Applications to Problems in Materials Science, Atlanta, October 1997; 6 Minisymposia at the ICIAM 99, the Fourth International Conference on Industrial and Applied Mathematics, Edinburgh, July 1999. Member: AMS, International Society for the Interaction of Mechanics and Mathematics, Society for Natural Philosophy.

Selected Publications: 1. with W. Gangbo, *Degree Theory in Analysis and Applications*, The Clarendon Press, Oxford University Press, New York, 1995. MR **96k**:47100; 2. with G. Bouchitté and J. Malý, The effective bulk energy of the relaxed energy of multiple integrals below the growth exponent, *Proc. Roy. Soc. Edinburgh Sect. A* **128** (1998), 463–479. MR **99i**:73024; 3. with G. Bouchitté and L. Mascarenhas, A global method for relaxation, *Arch. Rational Mech. Anal.* **145** (1998), 51–98. MR **99j**:49020; 4. with L. Ambrosio, P. Marcellini, and L. Tartar, On a volume-constrained variational problem, *Arch. Rational Mech. Anal.* **149** (1999), 23–47; 5. with S. Müller, $\mathcal{A}$-quasiconvexity, lower semicontinuity, and Young measures, *SIAM J. Math. Anal.* **30** (1999), 1355–1390.

Statement: Exciting technological developments are motivating remarkable advances in mathematics which in turn are contributing significantly to a better understanding of physical sciences, to the protection of the environment, and to promoting better health and education. The volume, depth, and structural complexity of the present body of mathematics make it imperative to find new approaches for communicating mathematical discoveries from one domain to another and to drastically improve the accessibility of mathematical ideas to nonmathematicians. The AMS has a pivotal role to play in this dialogue bridging mathematics and allied disciplines and in promoting leadership in new multidisciplinary and interdisciplinary areas of mathematics.

With new problems and challenges come new opportunities. The AMS may help in devising innovative training of young researchers so as to facilitate their employment in academic and nonacademic positions while preserving the capacity of researchers for deep academic fundamental research.

As a mathematician whose research interests lie at the interface between pure and applied mathematics, I look forward to the opportunity to serve the AMS in responding to this call.

Joel Hass

Professor of Mathematics, University of California, Davis.

Ph.D.: University of California, Berkeley, 1981.

Selected Addresses: Australian Mathematical Society, annual meeting, Melbourne, 1984; Pacific Geometry Conference, Berkeley, 1992; AMS-MAA Invited Address, Seattle, August 1996; International Conference on Topology and Geometry, Haifa, Israel, 1999; Invited Address, Symposium on Computational Geometry, Miami, 1999.

Additional Information: NSF Postdoctoral Fellow, 1984–1986; Sloan Foundation Fellow, 1989–1991; Editorial Board, *Geometriae Dedicata*, 1995–; Managing Editor, www.ecalculus.org, 1997–; Organizer, CBMS Research Conference, Davis, 1996; Coorganizer: AMS Special Session on The Geometry and Topology of 3-Manifolds, Davis, April 1998; Conference on Low-Dimensional Topology, Berkeley, 1998.

Selected Publications: 1. with M. H. Freedman and G. P. Scott, *Least area incompressible surfaces in* 3*-manifolds*, Invent. Math. **71** (1983), 609–642. MR **85e**:57012; 2. with H. Rubinstein and G. P. Scott, *Compactifying coverings of closed* 3*-manifolds*, J. Differential Geom. **30** (1989), 817–832. MR **91d**:57009; 3. *Bounded* 3*-manifolds admit negatively curved metrics with concave boundary*, J. Differential Geom. **40** (1994), 449–459. MR **96a**:53051; 4. with J. Lagarias and N. Pippenger, *The computational complexity of knot and link problems*, J. ACM **46** (1999), 185–211; 5. with R. Schlafly, *Double bubbles minimize*, Ann. of Math., to appear.

Statement: Mathematical research is the focus of the AMS. The Society has done a good job here, and I hope to contribute. Through conferences, publications, and international cooperation the AMS plays a key role in the continuing vitality of mathematical research. The AMS also plays an essential role in explaining the importance and utility of mathematical research to U.S. funding agencies and in making the general public (and our colleagues in the sciences) aware of the wide relevance of mathematics.

There will be challenges and opportunities in coming years. The AMS must continue to be a pioneer in the move to electronic publication to avoid being swamped in its wake. Mathematicians from all backgrounds must be welcomed to the profession and be given equal opportunities to progress in their careers. The AMS should encourage good working conditions for new Ph.D.'s in academia and in industry. Members should be encouraged to contribute to the exchange of ideas concerning the teaching of mathematics, but the AMS should be wary of endorsing untested teaching methods. To create new funding sources, the AMS should reach out to entrepreneurs who have flourished in the mathematically based Internet economy.

William James Lewis

Professor of Mathematics, University of Nebraska-Lincoln.

Born: February 11, 1945, Tallahassee, Florida.

Ph.D.: Louisiana State University, 1971.

AMS Committees: Committee on Science Policy, 1992–1997 (chair, 1995–1997); Committee on Resource Needs for Excellence in Mathematics Instruction, 1993–1995; AMS-MAA Committee on Teaching Assistants and Part-Time Instructors, 1994–1996; Committee on Education, 1995–1997 and 1999– ; Task Force on Excellence in Mathematics Scholarship, 1996–1998; AMS-ASA-IMS-MAA Data Committee, 1999– .

Selected Addresses: AMS-MAA Special Session on Mathematics and Education Reform, Cincinnati, January 1994; BMS National Chairs Meeting, Washington, DC, 1997; Plenary Lecture, "Shaping the Future" Conference, Michigan State University, East Lansing, 1998; AMS Leadership Conference, University of Indiana, Bloomington, 1999; AMS-MAA-MER Special Session on Mathematics and Education Reform, Washington, DC, January 2000.

Additional Information: Chair, Department of Mathematics and Statistics, University of Nebraska-Lincoln, 1988– ; President, UNL chapter of the AAUP, 1992; Project Director, CBMS Mathematics Education of Teachers; 1998– ; MAA-James R. C. Leitzel Lecture Committee, 1998–2000 (chair); Cochair, NRC Committee on Science and Mathematics Teacher Preparation, 1998– .

Selected Publications: 1. Educational change in a research university, *Changing the Culture: Mathematics Education in the Research Community*, CBMS Issues Math. Ed., vol. 5, Amer. Math. Soc., Providence, RI, 1995, pp. 187–205; 2. *Towards Excellence: Leading a Doctoral Mathematics Department in the 21st Century* (J. Ewing, ed.), chapters 1–4, Amer. Math. Soc., Providence, RI, 1999.

Statement: The primary goal of the American Mathematical Society must be to ensure the health of mathematics as an academic discipline and as a profession. Historically the AMS has met its responsibilities through its support of meetings and publications. More recently it appears necessary for the AMS to provide leadership for public policy that impacts mathematics, on matters of mathematics education, and on issues concerned with the status of the profession. In particular, the AMS must work to ensure the health of mathematics departments in our colleges and universities and to encourage support for mathematics among both the general citizenry and government officials. Special attention must be given to providing opportunities for young mathematicians and for women and minorities. My background as a member of two AMS policy committees and as a department chair at a research university should enable me to make further contributions to the AMS as an elected member of the AMS Council. I would appreciate the honor.

Paul S. Muhly

Professor of Mathematics and Professor of Statistics and Actuarial Science, University of Iowa.

Born: September 7, 1944, Annapolis, Maryland.

Ph.D.: University of Michigan, 1969.

AMS Committees: *Proceedings* Editorial Committee, 1984–1991; *Bulletin* Editorial Committee, 1991–1995 (associate editor, Research Announcements); e-Journal Review Committee, 1997; Committee on Professional Ethics (COPE), 1999–2002 (chair, 2000–2001).

Selected Addresses: AMS Special Session on L_1 Contraction and Doeblin Theory of Markov Operators, St. Louis, January 1977; AMS Special Session on Toeplitz Operators and Geometry, Atlanta, January 1988; AMS Invited Address, Muncie, October 1989; AMS Special Session on Group Representations and Operator Algebras, Louisville, January 1990.

Additional Information: Member, Board on Mathematical Sciences, 1992–1995; Member: AAAS, AMS, MAA, NCTM, SIAM.
Selected Publications: 1. with J. Xia, Calderón-Zygmund operators, local mean oscillation and certain automorphisms of the Toeplitz algebra, *Amer. J. Math.* **117** (1995), 1157–1201. MR **96k**:47045; 2. with B. Solel, Hilbert modules over operator algebras, *Mem. Amer. Math. Soc.* **117** (1995). MR **96c**:47060; 3. with B. Solel, Tensor algebras over C^*-correspondences: representations, dilations, and C^*-envelopes, *J. Funct. Anal.* **158** (1998), 389–457. MR **99j**:46066; 4. with A. Kumjian, J. Renault, and D. Williams, The Brauer group of a locally compact groupoid, *Amer. J. Math.* **120** (1998), 901–954. MR **2000b**:46122; 5. with D. Blecher and V. Paulsen, Categories of operator modules (Morita equivalence and projective modules), *Mem. Amer. Math. Soc.* **143** (2000).
Statement: The graying of the Society deserves the special attention of the Council—indeed, of the entire membership. We need to replenish our ranks without duplicating the imbalances that developed during the late '50s and throughout the '60s. America needs many more mathematicians and mathematically trained people. However, it needs academic mathematicians in measured numbers. How to renew ourselves and promote mathematics while maintaining the highest quality of mathematical research is the stiffest challenge facing our community. Part of the solution rests on identifying and nurturing mathematical talent, part rests on how we train our undergraduate and graduate students, part rests on how we interact with other disciplines, and still another part rests on how we promote ourselves to the public at large.

In addition to renewal two other issues continue to loom large on the Society's agenda: increased diversity and attracting the resources necessary to support our research.

Alexander J. Nagel

Professor of Mathematics, University of Wisconsin-Madison.
Born: September 13, 1945, New York, New York.
Ph.D.: Columbia University, 1971.
AMS Committees: Centennial Fellowships Committee, 1990–1991.
Selected Addresses: AMS Summer Institute on Harmonic Analysis in Euclidean Spaces and Related Topics, Williamstown, July 1978; AMS Invited Address, Denton, Texas, 1986; International Conference in Complex Analysis, Marseille, 1992; Plenary Address, Canadian Mathematical Society 50th Anniversary Meeting, 1995; Conference on Real Analysis, Oberwolfach, 1999.
Additional Information: John Simon Guggenheim Fellowship, 1987–1988; Chair, Department of Mathematics, University of Wisconsin-Madison, 1991–1993; Associate Dean for Natural Sciences, College of Letters and Science, University of Wisconsin-Madison, 1993–1998; Member: AAAS, AMS, MAA, Sigma Xi.
Selected Publications: 1. Smooth zero sets and interpolation sets for some algebras of holomorphic functions on strictly pseudoconvex domains, *Duke Math. J.* **43** (1976), 323–348. MR **56** #670; 2. with W. Rudin and J. Shapiro, Tangential boundary behavior of functions in Dirichlet-type spaces, *Ann. of Math.* **116** (1982), 331–360. MR **84a**:31002; 3. with E. M. Stein and S. Wainger, Balls and metrics defined by vector fields. I. Basic properties, *Acta Math.* **155** (1985), 103–147. MR **86k**:46049; 4. with D.-C. Chang and E. M. Stein, Estimates for the $\overline{\partial}$-Neumann problem in pseudoconvex domains of finite type in C^2, *Acta Math.* **169** (1992), 153–228. MR **93k**:32025; 5. with M. Christ, E. M. Stein, and S. Wainger, Singular and maximal Radon transforms: Analysis and geometry, *Ann. of Math.* **150** (1999), 489–577.
Statement: The mathematical community is pulled in many, often contradictory, directions. Mathematicians are expected to discover deep new theorems in fields that require years of study to master and are also expected to explain to the general public the importance of mathematical research in language that a nonexpert can understand. We must interact with and contribute to other areas of science, technology, and social science, but at the same time we need to protect and enhance research that has no apparent practical importance. We are expected to train new generations of highly talented professional mathematicians and, at the other end of the instructional spectrum, to teach basic mathematical literacy to many who have at best only marginal interest in any scientific subject. We must utilize the latest developments in instructional technology, but we must not reduce mathematical instruction to learning a series of electronically enhanced algorithms. This list could be expanded indefinitely. There is no simple solution to all conflicting demands, but the American Mathematical Society must be a forum in which the many needs and requirements of mathematics are rationally considered. On the Council, I would hope to help provide reasoned responses to issues while avoiding doctrinaire positions.

Irena Peeva

Assistant Professor of Mathematics, Cornell University.
Ph.D.: Brandeis University, 1995.
Selected Addresses: Commutative Algebra and Algebraic Geometry, CIRM, Luminy, France, 1996; Colloquium Talk, University of California at Berkeley, 1997; Commutative Algebra and Algebraic Geometry, Oberwolfach, 1999.
Additional Information: Sloan Doctoral Dissertation Fellowship, 1994–1995; C.L.E. Moore Instructorship, MIT, 1995–1998; Sloan Research Fellowship, 1999–2001. Coorganizer: Workshop on Regularity of Toric Varieties, University of California at Berkeley, March 1996; AMS Special Sessions on Commutative Algebra, Montreal, September 1997; Commutative Algebra, Chicago, September 1998; Algebraic Geometry and Commutative Algebra, Washington, DC, January 2000.
Selected Publications: 1. with L. Avramov and V. Gasharov, Complete intersection dimension, *Inst. Hautes Études Sci. Publ. Math.* **86** (1997), 67–114. MR **99c**:13033; 2. with

B. Sturmfels, Generic lattice ideals, *J. Amer. Math. Soc.* **11** (1998), 363–373. MR **98i**:13022; 3. with V. Reiner and B. Sturmfels, How to shell a monoid, *Math. Ann.* **310** (1998), 379–393. MR **99d**:13020; 4. with V. Gasharov and V. Welker, The lcm-lattice in monomial resolutions, *Math. Res. Lett.* **6** (1999), 521–532; 5. with V. Gasharov, Deformations of codimension 2 toric varieties, *Compositio Math.,* to appear.
Statement: If I am elected to the Council, I will contribute especially to the discussions on issues related to high-quality research, employment, research funding, mathematical conferences and journals, encouraging underrepresented groups to get into mathematics, and other issues important for the whole mathematical community.

Louise Arakelian Raphael

Professor of Mathematics, Howard University.
Born: October 24, l937, New York, New York.
Ph.D.: Catholic University, 1967.
AMS Committees: AMS-MAA-SIAM Congressional Science Fellowship Selection Panel, 1985–1986; 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– .
Selected Addresses: AMS Special Session on Analytic Methods in Differential Equations, New Orleans, January 1986; AMS Special Session on Hopf Algebras, San Francisco, January 1991; International Conference on Computational Mathematics, Indira Gandhi University, New Delhi, India, January 1993; 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.
Additional Information: Administrative Posts: Acting Administrative Officer, CBMS, Washington, D.C., 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, September 1987–August 1988. Visiting Posts: Visiting Associate Professor, Massachusetts Institute of Technology, 1977–1978; Visiting Professor, Massachusetts Institute of Technology, 1989–1990; Visiting Member, New York University, Courant Institute of Mathematical Sciences, 1997–1998. National 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.
Selected Publications: 1. with P. S. Hirschhorn, Coalgebraic foundations of the method of divided differences, *Adv. Math.* **91** (1992), 75–135. MR **92m**:05012; 2. with S. E. Kelly and M. Kon, Pointwise convergence of wavelet expansions, *Bull. Amer. Math. Soc.* **30** (1994), 87–94. MR **95a**:42048; 3. with S. E. Kelly and M. Kon, Local convergence for wavelet expansions, *J. Funct. Anal.* **126** (1994), 102–138. MR **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. MR **99f**:42067; 5. with M. Kon, Convergence rates of multiscale and wavelet expansion, *Wavelet Transforms and Time-Frequency Signal Analysis* (L. Debanath, ed.), CBMS Regional Conf. Series in Math., to appear.
Statement: The AMS articulates the mathematical community's needs for maintaining excellence in research and our advanced degree programs. However, there are areas in which an AMS presence is also needed. Two particular activities that I propose are: [1] developing a program that welcomes and informs new doctorates about the "tools of the trade" and [2] joining other societies to build bridges in the so-called "Math Wars".

[1] The AMS could embed sessions into programs of regular meetings that help new doctorates connect with the profession. An exemplary model of a professional development program for new Ph.D.'s in mathematics is the Mathematical Association of America's Project NExT. The NExT Fellows and their mentors run workshops on a spectrum of issues ranging from teaching and learning in mathematics to getting research grants and tenure. As a former first vice-president of the MAA, I have seen the wealth of information that Project NExT has developed. All new doctorates should have access to this kind of helpful information.

[2] The AMS could build bridges between the two sides of the "Math Wars". I write as a researcher who heads a Howard University grassroots volunteer partnership between parents, teachers, ministers in African-American churches, and faculty. We are working with elementary school at-risk students and their parents. With parents we are sharing mathematical benchmarks that most children should have attained at certain grade levels. It is clear that we, as well as both sides of the "Math Wars", want our children to understand and master mathematical processes in order to solve meaningful problems. The AMS could help all interested parties work together to achieve this goal.

Hema Srinivasan

Professor of Mathematics, University of Missouri.
Born: May 11, 1959, Gwalior, India.
Ph.D.: Brandeis University, 1986.
Selected Addresses: Buchsbaum Conference, Commutative Algebra, Combinatorics and Representation Theory, Northeastern University, Boston, October 1998; AMS Special Session on Commutative Algebra and Algebraic Geometry, San Antonio, January 1999; International Conference on Commutative Algebra and Algebraic Geometry,

Messina, Italy, June 1999; AMS Special Session on Syzygies, Lowell, April 2000; Centennial Celebration of Commutative Algebra, Nebraska, April 2000.
Selected Publications: 1. *Algebra structures on some canonical resolutions*, J. Algebra **122** (1989), 150–187. MR **90g**:13028; 2. with S. D. Cutkosky, *An intrinsic criterion for isomorphism of singularities*, Amer. J. Math. **115** (1993), 789–821. MR **94h**:14005; 3. *A grade five Gorenstein algebra with no minimal algebra resolutions*, J. Algebra **179** (1996), 362–379. MR **96j**:13012; 4. with J. Herzog, *Bounds for multiplicities*, Trans. Amer. Math. Soc. **350** (1998), 2879–2902. MR **99g**:13033; 5. with S. D. Cutkosky, *Algebraic fundamental group of a curve singularity*, J. Algebra, to appear.
Statement: The AMS exists to promote mathematical research and to represent the interests of mathematicians. I believe that the AMS has an important role in solving the problem of shrinking library budgets and increasing journal costs. We must strive to promote high quality while maintaining and even increasing accessibility. Nurturing mathematicians early in their careers benefits both mathematics and the mathematical community. AMS meetings provide an ideal setting for this. In addition, we must effectively communicate the adventure and excitement in mathematical research to attract the best and most creative minds among the younger generation.

Nominating Committee

Jonathan L. Alperin
Professor of Mathematics, University of Chicago.
Born: June 2, 1937, Boston, Massachusetts.
Ph.D.: Princeton University, 1961.
AMS Offices: Member at Large of the Council, 1989–1991.
AMS Committees: Committee on the Summer Institute on Classification of Simple Groups and New Directions, 1979; Committee on the Summer Institute on Representations of Finite Groups and Related Topics, 1987 (chair); Committee on Summer Institutes and Special Symposia, 1993–1995; *Mathematical Reviews* Editorial Committee, 1995– ; Collected Works Editorial Committee, 1998– (chair).
Selected Addresses: AMS Special Sessions: Finite Simple Groups, Madison, April 1970; Finite Group Theory, St. Louis, January 1977; Representations of Finite Dimensional Algebras and Finite Groups, Atlanta, January 1978. AMS Invited Address, Chicago, November 1975; AMS-MAA Invited Address, Baltimore, January 1998.
Additional Information: Organizing Committee, Summer Research Institute on Finite Group Theory, Santa Cruz, July 1979; ***Member:*** AMS, AWM, MAA.
Selected Publications: 1. Sylow intersections and fusion, *J. Algebra* **6** (1967), 222–241. MR **35**#6748; 2. with M. Broue, Local methods in block theory, *Ann. of Math.* **110** (1979), 143–157. MR **80f**:20010; 3. with L. Evens, Representations, resolutions and Quillen's Dimension Theorem, *J. Pure Appl. Algebra* **22** (1981), 1–9. MR **82j**:20020; 4. Weights for finite groups, *The Arcata Conference on Representations of Finite Groups* (Arcata, CA, 1986), Proc. Sympos. Pure Math., vol. 47, Amer. Math. Soc., Providence, RI, 1987, pp. 369–379. MR **89h**:20015; 5. with R. Bell, *Groups and Representations*, Grad. Texts in Math., vol. 162, Springer-Verlag, New York, 1995. MR **96m**:20001.
Statement: The role of the Nomination Committee is crucial to the Society, and serving on the committee is a great opportunity as well as an honor.

Irwin Kra

Distinguished Service Professor, State University of New York at Stony Brook.
Born: January 5, 1937, Poland.
Ph.D.: Columbia University, 1966.
AMS Offices: Member at Large of the Council, 1988–1990; Council Representative, *Proceedings* Editorial Committee, 1991–1996.
AMS Committees: Ad Hoc Committee on the *Notices* Editorial Policy, 1975; Committee on Employment and Educational Policy, 1982–1984; Joint Committee on the Status of the Profession, 1984; *Proceedings* Editorial Committee, 1984–1988, 1991–1997 (co-chair, 1991; managing editor, 1991–1997; chair, 1992–1997); *Mathematical Surveys and Monographs* Editorial Committee, 1986–1988; *Contemporary Mathematics* Editorial Committee, 1986–1989 (chair, 1986–1988; managing editor, 1986–1989); Committee on Membership, Board of Trustees, 1986–1990; Committee on Committees, 1986–1990 (chair, 1988); Committee on Long-Range Planning, 1987–1989 (chair, 1989); Executive Committee of the Council, 1987–1990; Ad Hoc Election Scheduling Committee, 1989; Subcommittee on Appointments of the Committee on National Awards and Public Representation, 1989–1995 (chair); Agenda and Budget Committee, 1990; Committee on Procedures for the Committee on Professional Ethics, 1995; Policy Review Committee for Publications, 1996; e-Journal Review Committee, 1997; Committee on Academic Freedom, Tenure, and Employment Security, 1998– ; Ad Hoc Committee to Review the *Notices of the American Mathematical Society*, 2000.
Selected Addresses: AMS Invited Address, Syracuse, October 1978; AMS Special Session on Extremal Riemann Surfaces, San Francisco, January 1995; Special Session on Complex Analysis, AMS-Israel Mathematical Union, Jerusalem, May 1995; AMS Special Session on Discrete Conformal Geometry, Atlanta, October 1997; AMS Special Session on Modular Identities and q-series in Number Theory, Philadelphia, April 1998.
Additional Information: John Simon Guggenheim Memorial Foundation Fellow, 1972–1973; Advisory Professor, Fudan University, Shanghai, 1987– .
Selected Publications: 1. On cohomology of Kleinian groups: I. *Ann. of Math.* **89** (1969), 533–556. MR **41** #8656a; II. *Ann. of Math.* **90** (1969), 576–590. MR **41** #8656b; 2. with H. M. Farkas, *Riemann Surfaces*, Grad. Texts in Math., vol. 71, Springer-Verlag, New York, 1980. MR **82c**:30067.

Second edition, 1992. MR **93a**:30047; 3. On the vanishing of and spanning sets for Poincaré series for cusp forms, *Acta. Math.* **153** (1984), 47–116. MR **86b**:30070; 4. Horocyclic coordinates for Riemann surfaces and moduli spaces. I. Teichmüller and Riemann spaces of Kleinian groups, *J. Amer. Math. Soc.* **3** (1990), 499–578. MR **91c**:32014; 5. with H. M. Farkas, A function-theoretic approach to the Ramanujan partition identities with applications to combinatorial number theory, *Complex Geometry of Groups (Olmué, 1998)*, Contemp. Math., vol. 240, Amer. Math. Soc., Providence, RI, 1999, pp. 131–157.

Statement: The AMS is a creative hybrid: an elitist scholarly society combined with a professional membership organization. In its first incarnation, it serves the best interests of the discipline; in the second, the goals and aspirations of the mathematics research community.

The function of the Nominating Committee is to select the most suitable candidates to nominate for the various contested leadership positions within the Society, of which the most visible is the presidency. Traditionally, the incumbents have been mathematicians of the highest achievement (of Fields Medal caliber). The tradition has served the Society well and should continue; to be taken into account, however, is the fact that not every original thinker is also a talented spokesperson and administrator. The less visible positions (for example, Council membership) should be filled by a broad spectrum of candidates with strong research accomplishments who (as a group) also reflect the diversity of interests of the membership.

An active effort must be made to expand the pool of mathematicians participating in the governance of the Society. Our efforts should insure the orderly flow of the talented into mathematics and the creation of an environment—in our universities, research institutions, industries, and society as a whole—that fosters the appreciation and understanding of our discipline.

Cora Sadosky

Professor of Mathematics, Howard University.

Born: May 23, 1940, Buenos Aires, Argentina.

Ph.D.: University of Chicago, 1965.

AMS Offices: Member at Large of the Council, 1986–1987 and 1995–1998.

AMS Committees: Committee on Cooperation with Latin American Mathematicians, 1990–1992; Committee on the Human Rights of Mathematicians, 1990–1995; Committee on Science Policy, 1996–1998.

Selected Addresses: ***Plenary Addresses***: AMS Invited Address, Richmond, November 1994; Conference in Honor of M. Livsic, Beer Sheva, Israel, 1997; IWOTA Conference, Groeningen, The Netherlands, 1998; Conference in Memory of B. Sz.-Nagy, Szeged, Hungary, 1999; IWOTA Conference, Bordeaux, France, 2000.

Additional Information: Member, Institute for Advanced Study, 1978–1979 and 1983–1984; NSF Visiting Professorship for Women in Science and Technology, 1983–1984 and 1995–1996; NSF Career Advancement Award, 1987–1988; Member, MSRI, 1987–1988; Association for Women in Mathematics, President, 1993–1995; AWM President Elect/Past President, 1992, 1995; Nominating Committee, 1996 (chair); Scientific Organizing Committee for the Program on Holomorphic Spaces, Mathematical Sciences Research Institute, Berkeley, CA, 1995; Research Professor, Mathematical Sciences Research Institute, 1995–1996; AAAS Fellow, 1997– ; Visiting Professor, Institut des Hautes Études Scientifiques, Bures-sur-Yvette, France, 1999.

Selected Publications: 1. *Interpolation of Operators and Singular Integrals*, Dekker, New York and Basel, 1979. MR **81d**:42001; 2. *Analysis and Partial Differential Equations: A Collection of Papers Dedicated to Mischa Cotlar* (C. Sadosky, ed.), Lecture Notes in Pure and Appl. Math., vol. 122, Dekker, New York and Basel, 1990. MR **90j**:00006; 3. with M. Cotlar, Transference of metrics induced by unitary couplings, a Sarason theorem for the bidimensional torus, and a Sz.-Nagy-Foias theorem for two pairs of dilations, *J. Funct. Anal.* **111** (1993), 473–488. MR **94g**:47007; 4. Liftings of kernels shift-invariant in scattering systems, *Holomorphic Spaces (Berkeley, CA, 1995)*, Math. Sci. Res. Inst. Publ., vol. 33, Cambridge University Press, Cambridge, 1998, pp. 303–336. MR **99e**:47034; 5. *Harmonic Analysis and Partial Differential Equations: Essays in Honor of Alberto P. Calderón* (M. Christ, C. E. Kenig, and C. Sadosky, eds.), University of Chicago Press, Chicago, 1999.

Statement: If elected, I will strive to nominate candidates who are interested in and committed to their prospective duties, actively seeking to diversify and democratize the governing and policymaking bodies of our society.

Audrey A. Terras

Professor of Mathematics, University of California at San Diego.

Born: September 10, 1942, Washington, DC.

Ph.D.: Yale University, 1970.

AMS Offices: Member at Large of the Council, 1985–1987.

AMS Committees: Employment Concerns Subcommittee, 1977–1988; AMS-MAA Employment and Educational Policy Committee, 1986–1988; Committee on Committees, 1986–1988; *Transactions* and *Memoirs* Editorial Committee, 1987–1991; AMS-MAA Joint Program Committee for the San Francisco Meeting, 1990; AMS-MAA Joint Program Committee for Orono Meeting, 1991 (chair); Blue Ribbon Committee for the World Mathematical Year 2000, 1995–1999; Program Committee for the Year 2000 Meeting on Problems, Programs, and Prospects of 21st Century Mathematics, 1997–1999; Western Section Program Committee, 1999–2001 (chair, 2000);

Bulletin Editorial Committee, 2000– (associate editor, Book Reviews).
Selected Addresses: MSRI Workshop on Spectral Theory of Automorphic Forms, October 1994; IMA Workshop on Emerging Applications of Number Theory, July 1996; AMS Special Session on Number Theory, Pretoria, June 1997; Workshop on Special Functions, Hong Kong, June 1999; MathFest 2000, University of California at Los Angeles, August 2000.
Additional Information: Member: AAAS, AMS, AWM, AWS, MAA, SIAM. ***Honors & Awards***: NSF Principal Investigator, 1974–1987; AAAS Fellow, 1982; Member, IAS, Spring 1984; MSRI Research Professor, Winter 1992; Listed in *Who's Who in America*, 1995–2000.
Selected Publications: 1. *Harmonic Analysis on Symmetric Spaces and Applications*, two volumes, Springer-Verlag, New York, 1985, 1988. MR **87f**:22010 (I); MR **89k**:22017 (II); 2. Survey of spectra of Laplacians on finite symmetric spaces, *Experiment. Math.* **5** (1996), 15–32. MR **97m**:11154; 3. with H. Stark, Zeta functions of finite graphs and coverings, *Adv. Math.* **121** (1996), 124–165. MR **98b**:11094 (Part II to appear); 4. *Fourier Analysis on Finite Groups and Applications*, London Math. Soc. Stud. Texts, vol. 43, Cambridge University Press, Cambridge, 1999. MR **2000d**:11003; 5. with M. Martinez and H. Stark, Some Ramanujan hypergraphs associated to $GL(n, Fq)$, *Proc. Amer. Math. Soc.*, to appear.
Statement: My chief goal as a member of the Nominating Committee would be to ensure that the nominees represent all areas of our mathematical community.

Thomas W. Tucker

Charles G. Hetherington Professor of Mathematics, Colgate University.
Born: July 15, 1945, Princeton, New Jersey.
Ph.D.: Dartmouth College, 1971.
AMS Committees: JPBM Committee for Mathematics Department Heads, 1987–1990.
Selected Addresses: Numerous Special Sessions at regional or national meetings, 1973–1999; The Christie Lecture, MAA New England Sectional Meeting, 1986; Plenary Speaker, National Academy of Sciences Symposium on Calculus for a New Century, 1987; Special Session on Graph Theory, Las Vegas, April 1999.
Additional Information: First Vice President, MAA, 1990–1992; Chair of various MAA committees, including the Committee on the Undergraduate Program (CUPM) and Committee on Calculus Reform and the First Two Years (CRAFTY); Chair, College Board Committee on the Advanced Placement Program in Mathematics, 1983–1987; President of the Calculus Consortium for Higher Education.
Selected Publications: 1. Non-compact 3-manifolds and the missing-boundary problem, *Topology* **13** (1974), 267–273. MR **50** #5801; 2. Finite groups acting on surfaces and the genus of a group, *J. Combin. Theory Ser. B* **34** (1983), 82–98. MR **85b**:20055; 3. with J. L. Gross, *Topological Graph Theory*, Wiley, New York, 1987. MR **88h**:05034; 4. with P. Scott, Some examples of exotic noncompact 3-manifolds, *Quart. J. Math. Oxford Ser. 2* **40** (1989), 481–499. MR **91b**:57021; 5. with J. L. Gross, Stratified graphs for imbedding systems, *Discrete Math.* **143** (1995), 71–85. MR **96m**:05065.
Statement: Although I am a thirty-year member of the AMS, I have devoted most of my energy to the MAA. I have always believed that the U.S. is fortunate to have two professional organizations having missions involving higher education in mathematics so that both undergraduate and graduate education get the attention they deserve. On the other hand, it is crucial that these organizations cooperate, now more than ever. I would hope that my experiences in the MAA, and also in secondary education through the Advanced Placement Program, can strengthen that cooperation.

Steven H. Weintraub

Professor of Mathematics, Louisiana State University.
Born: January 25, 1951, New York, New York.
Ph.D.: Princeton University, 1974.
AMS Offices: Member at Large of the Council, 1991–1993.
AMS Committees: *Notices* Editorial Committee, 1985–1988; Committee on Human Rights of Mathematicians, 1990–1992; Ad Hoc Committee to Study the Committee Structure, 1992; Committee on the Profession, 1993– 1998; Editor, *What's New in Mathematics,* `http://www.ams.org/new-in-math/`, 1996–1998; Centennial Fellowships Committee, 1998–2000.
Selected Addresses: Special Session on Arithmetic Groups, Denton, November 1990; Special Session on Topological Methods in Group Theory, Vancouver, August 1993; Algebraic Group Actions, Kazimiercz, Poland, 1996; Group Actions on Manifolds, Oberwolfach, 1998; Special Session on Algebraic Geometry, Charlotte, August 1999.
Selected Publications: 1. with R. Lee and E. Y. Miller, Rochlin invariants, theta functions and the holonomy of some determinant line bundles, *J. Reine Angew. Math.* **392** (1988), 187–218. MR **89m**:57022; 2. with K. Hulek and C. Kahn, *Moduli Spaces of Abelian Surfaces: Compactification, Degenerations, and Theta Functions*, de Gruyter, Berlin, 1993. MR **95e**:14034; 3. Count-wheels: A mathematical problem arising in horology, *Amer. Math. Monthly* **102** (1995), 310–316. MR **96f**:01045; 4. *Differential Forms: A Complement to Vector Calculus*, Academic Press, San Diego, 1997. MR **97g**:58002; 5. with R. Lee, The Siegel modular variety of degree two and level four, *Mem. Amer. Math. Soc.* **133** (1998), 1–58. MR **98j**:14031.
Statement: Nomination by the Nominating Committee is the primary method by which candidates for AMS offices are named. Thus the Nominating Committee must work well in order for AMS democracy to work well.

The membership of the AMS is a diverse lot in many ways (gender, race, professional status, type of employment, etc.). Further, while scientific concerns (the publication and meetings programs) and the advancement of mathematical research remain the essential core of AMS activities, the AMS has, quite properly, expanded its scope to include many other issues (employment and other professional concerns, public awareness of mathematics, education, funding, etc.).

As the largest and most active society of mathematicians in the world, the AMS is in a unique position to advance mathematicians' concerns. As a member of the Nominating Committee, I would seek out candidates who represent the broad spectrum of AMS members and who are ready and eager to tackle the many challenges that face mathematics in general and the AMS in particular.

In my terms on the Council and on AMS committees, I have served with energy and, I hope, well. I would serve on the Nominating Committee with the same enthusiasm.

Editorial Boards Committee

Paul R. Blanchard
Associate Professor of Mathematics, Boston University.
Born: October 31, 1951, Worcester, Massachusetts.
Ph.D.: Yale University, 1978.
Selected Addresses: Invited Address, "The Dynamics of Complex Polynomials and Automorphisms of the Shift", Hausdorff Seminar, Bonn University, May 1988; Series of six lectures on complex-analytic dynamics, NATO Conference on Fractals, Université de Montréal, July 1989; Invited Address, "The Dynamics of Newton's Method", MAA Meeting, Hartford, November 1992; AMS Invited Address, Knoxville, March 1993; AMS Short Course on Complex Dynamics, Cincinnati, January 1994.
Additional Information: MAA Committee on Sessions of Contributed Papers, 1997– .
Selected Publications: 1. with A. Chiu, Complex dynamics: An informal discussion, *Fractal Geometry and Analysis* (J. Bélair and S. Dubuc, eds.), Kluwer, Dordrecht, 1991, pp. 45–98; 2. with R. Devaney and L. Keen, The dynamics of complex polynomials and automorphisms of the shift, *Invent. Math.* **104** (1991), 545–580. MR **92f**:58150; 3. Complex analytic dynamics on the Riemann sphere, *Bull. Amer. Math. Soc. (N.S.)* **11** (1984), 85–141. MR **85h**:58001. Reprinted in *Nonlinear and Global Analysis* (F. Browder, ed.), Amer. Math. Soc., Providence, RI, 1992, pp. 551–607; 4. The dynamics of Newton's method, *Complex Dynamical Systems: The Mathematics behind the Mandelbrot and Julia Sets* (R. L. Devaney, ed.), Proc. Sympos. Appl. Math., vol. 49, Amer. Math. Soc., Providence, RI, 1994, pp. 139–154; 5. with Robert L. Devaney and Glen R. Hall, *Differential Equations*, Brooks/Cole, 1998.

Tony F. Chan
Professor and Chair, Department of Mathematics, University of California at Los Angeles.
Born: January 20, 1952, Hong Kong.
Ph.D.: Stanford University, 1978.

AMS Committees: Committee on Committees, 1999– ; Arrangements Committee for Mathematical Challenges of the 21st Century, University of California at Los Angeles, August 7–12, 2000 (chair).
Selected Addresses: ***Plenary Speaker***: SIAM National Meeting, San Diego, July 1989; SIAM Conference on Parallel Processing, Norfolk, March 1993; SIAM Conference on Sparse Matrices, Coeur d'Alene, October 1996; Dundee Conferences on Numerical Analysis, U.K., June 1999.
Additional Information: External Review Committee, Center for Applied Scientific Computing, Lawrence Livermore National Laboratory, 1998; Member, NSF Math and Physical Science Advisory Committee, 1999– ; Board of Trustees and Principal Investigator, Institute of Pure and Applied Mathematics, UCLA, 1999– ; Member: AMS, IEEE, MAA, SIAM; Editorial Boards: *SIAM Journal on Scientific Computing*, 1987– ; *SIAM Review*, 1989–1998; *Numerical Linear Algebra and Its Applications*, 1991– ; *Numerical Algorithms*, 1992– ; *Journal of Computational Mathematics*, 1993– ; *Electronic Transactions on Numerical Analysis*, 1995– ; *The Asian Journal of Mathematics*, 1997– ; Co-chair (with Richard Tapia), SIAM National Meeting, Puerto Rico, July 2000.
Selected Publications: 1. Rank revealing *QR* factorizations, *Linear Algebra Appl.* **88/89** (1987), 67–82. MR **88c**:15011; 2. with T. Mathew, Domain decomposition algorithms, *Acta Numer.* (1994), 61–143. MR **95f**:65214; 3. with S. Go and L. Zikatanov, *Lecture Notes on Multilevel Methods for Elliptic Problems on Unstructured Grids*, Von Karman Institute, Brussels, March 1997; 4. with C. J. Alpert, A. B. Kahng, I. L. Markov, and P. Mulet, Fast minimization of linear wirelength for global placement, *IEEE Trans. Comp. Aided Design of Integrated Circuits and Systems* **17** (1998), 3–13; 5. with P. Blomgren, Color TV: Total variation methods for restoration of vector-valued images, *IEEE Trans. Image Process.* **7** (1998), 304–309.
Statement: If elected, I intend to do the following: 1. Make use of my personal contacts and beyond to cast a wide net in seeking nominations for AMS journal editors to ensure long-established quality and standards; 2. Make use of my editorial experience to deal with policy issues, such as maintaining low cost of AMS journals in the face of cutbacks at academic libraries, electronic publishing, speeding up the publishing process, etc.; 3. Make use of my background as an applied and interdisciplinary mathematician to have AMS journals respond to new mathematical developments and represent the full diversity of its members' interests.

Jane P. Gilman
Professor of Mathematics, Rutgers University-Newark.
Born: April 17, 1945, Washington, DC.
Ph.D.: Columbia University, 1971.
AMS Offices: Member at Large of the Council, 1986–1988.

AMS Committees: Nominating Committee, 1988–1989 (chair), and 1996–1998; Election Scheduling Committee, 1988–1989; Nominating Committee Scheduling Committee, 1990.
Selected Addresses: Fifteen AMS Special Session talks between 1978 and 2000; Invited Speaker, AMS-IMS-SIAM Joint Summer Conference on Riemann Surfaces and Discrete Groups, Arcata, July 1989; Invited Speaker, AMS Joint Summer Conference on Nielsen Theory and Dynamical Systems, South Hadley, June 1992; Invited Speaker, London Mathematical Society Conference on Hyperbolic Groups, King's College, 1995; Invited Speaker, Conference on Computational and Algorithmic Methods in Three-Dimensional Topology, MSRI, 1997.
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Selected Publications: 1. A matrix representation for automorphisms of compact Riemann surfaces, *Linear Algebra Appl.* **17** (1977), 139–147. MR **58**#17077; 2. On the Nielsen type and the classification for the mapping class group, *Adv. in Math.* **40** (1981), 68–96. MR **82i**:57006; 3. A geometric approach to the hyperbolic Jørgensen inequality, *Bull. Amer. Math. Soc. (N.S.)* **16** (1987), 91–92. MR **87m**:30072; 4. Two-generator discrete subgroups of PSL(2, **R**), *Mem. Amer. Math. Soc.* **117** (1995). MR **97a**:20082; 5. Algorithms, complexity and discreteness criteria in PSL(2, **C**), *J. Anal. Math.* **73** (1997), 91–114. MR **99c**:20062.

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Selected Publications: 1. with R. Howard, Processes of flats induced by higher-dimensional processes, *Adv. Math.* **80** (1990), 92–109. MR **91d**:60025; 2. with W. Weil, Centrally symmetric convex bodies and the spherical Radon transform, *J. Differential Geom.* **35** (1992), 675–688. MR **93g**:44005; 3. Radon transforms of projection functions, *Math. Proc. Cambridge Philos. Soc.* **123** (1998), 159–168. MR **98k**:52013; 4. with G. Zhang, Inequalities between projection functions of convex bodies, *Amer. J. Math.* **120** (1998), 345–367. MR **99h**:52010; 5. Minkowski sums of projections of convex bodies, *Mathematika* **45** (1999), 253–268. MR **2000e**:52002.
Statement: The primary goal of the AMS is to encourage the broad range of mathematical research activities in the U.S. Part of this goal is achieved by producing consistently high-quality publications. I would be pleased to do whatever I could as a member of the Editorial Boards Committee to maintain and promote uniformly high mathematical standards in the Society's research journals.