

Biographies of Candidates 2001

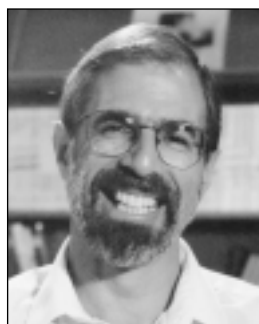
Biographical information about the candidates has been verified by the candidates, although in a few instances prior travel arrangements of the candidate at the time of assembly of the information made communication difficult or impossible. A candidate had the opportunity to make a statement of not more 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

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; Vice President, 2000–.

AMS Committees: *Proceedings* Editorial Committee, 1978–1982; Cen-

tennial 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; Executive Committee of the Council, 2001–; Science Policy Committee, 2001–.

Selected Addresses: Invited Lecture, International Congress of Mathematicians, Vancouver, 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; Owens Lecture, Wayne State University, 2001.

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–; *Annals of Mathematics*, Associate Editor, 2000–. **Committees:** Board of Mathematical Sciences; U.S. National Committee of the International Mathematical Union. **Other positions held:** Lecturer, Brandeis University, 1970–1972; Assistant Professor, Brandeis University, 1972–1973; Visiting Scholar, Harvard University, 1973–1974; Alfred P. Sloan Foundation Fellow, 1973–1975; 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; 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. MR 57:7651; 2. with W. Neumann, *Three-Dimensional Link Theory and Invariants of Plane Curve*

Singularities, Ann. of Math. Stud., vol. 110, Princeton University Press, Princeton, 1985. MR 87g:57007; 3. with J. Harris, The Kodaira dimension of the moduli space of curves of genus ≥ 23 , *Invent. Math.* 90 (1987), 359–387. MR 88g:14027; 4. *Commutative Algebra with a View toward Algebraic Geometry*, Grad. Texts in Math., vol. 150, Springer-Verlag, New York, 1995. MR 97a:13001; 5. with S. Popescu, Gale duality and free resolutions of ideals of points, *Invent. Math.* 136 (1999), 419–449. MR 2000i:13014; 6. with J. Harris, *The Geometry of Schemes*, Grad. Texts in Math., vol. 197, Springer-Verlag, New York, 2000. MR 2001d:14002.

Statement: This is an important time for the AMS to be strong and active in supporting mathematical research and education. There is great opportunity: the director of the NSF, Rita Colwell, is publicly committed to quadrupling the budget of the Division of Mathematical Sciences. The current strength of mathematical research, its importance in applications, and its underfunding since the '70s are the primary reasons for her position. But her awareness of the situation and her readiness to act came about through work of committed people at the AMS, its sister organizations, and the NSF.

In this climate we must be clear about our goals. Mine are: more support for first-class fundamental research; increased contact between mathematics and its applications in other sciences and engineering; more effective encouragement of those with mathematical talents and interests, especially among women and minorities; and improvement of mathematical education to give students the tools they need and to bring the best back into mathematical careers.

In approaching these goals we should take a broad view of mathematics. We should recognize that it takes place at a great range of institutions, from research universities and government centers to colleges and industrial labs. The AMS needs to collaborate with other mathematical and statistical societies and with the societies for women and minority scientists. We should reach out to engineering and to other sciences. The public is increasingly interested in mathematics—witness the books, plays, movies, and TV shows on Fermat and other mathematical themes. We ought to encourage this with vivid, interesting, accurate material.

As director of the Mathematical Sciences Research Institute (MSRI) for the last four years, I have worked toward these goals and raised funds to support them. I have had the opportunity to travel to many departments and to listen to the ideas of mathematicians from all over the world who come to MSRI. I have experienced the difficulty of implementing these ideas—and sometimes had the joy of success.

The AMS is the leading group representing the mathematical sciences in this country, perhaps in the world. I feel deeply honored to have been nominated for the presidency. Should I be elected, I hope that my love of research, my commitment to the breadth of the mathematical sciences, and my experience in nurturing mathematical activity will help me to guide the Society well.

David A. Vogan Jr.

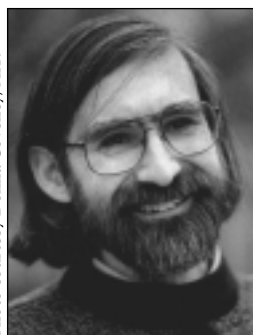


Photo courtesy Donna Coveney/MIT.

Chair, Department of Mathematics, Massachusetts Institute of Technology.

Born: September 8, 1954, Mercer, Pennsylvania.

Ph.D.: Massachusetts Institute of Technology, 1976.

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

AMS Committees: Review Committee for JPBM, 1987; Associate Editor for Research-Expository Articles, *Bulletin*,

1987–1992; Science Policy Committee, 1989–1991; Committee to Select the Gibbs Lecturer, 1990–1991; Task Force on Excellence in Mathematics Scholarship, 1993–1998; Associate Editor for Research Reports, *Bulletin*, 1995–2001; Managing Editor, *Journal of Representation Theory*, 1997–; Committee on the Human Rights of Mathematicians, 1999–2001; Associate Editor for Bulletin Articles, *Bulletin*, 2001–.

Selected Addresses: AMS Invited Address, Eugene, August 1984; Hermann Weyl Memorial Lectures, Institute for Advanced Study, January 1986; Invited Address, International Congress of Mathematicians, Berkeley, 1986; Graduate Summer School of the Park City Mathematics Institute, July 1998; Mathematics towards the Third Millennium, Accademia dei Lincei, Rome, May 1999.

Additional Information: Member: Board of Directors, The Giving Back Fund (<http://www.givingback.org>); Editorial Board, *International Mathematics Research Notices*, 1990–; American Academy of Arts and Sciences, 1996.

Selected Publications: 1. The algebraic structure of the representation of semisimple Lie groups. I, *Ann. of Math.* 109 (1979), 1–60. MR 81j:22020; 2. The unitary dual of $GL(n)$ over an Archimedean field, *Invent. Math.* 83 (1986), 449–505. MR 87i:22042; 3. with J. Adams and D. Barbasch, *The Langlands Classification and Irreducible Characters for Real Reductive Groups*, Progr. Math., vol. 104, Birkhäuser, Boston, 1992. MR 93j:22001; 4. with A. Knapp, *Cohomological Induction and Unitary Representations*, Princeton Math. Ser., vol. 45, Princeton University Press, Princeton, NJ, 1995. MR 96c:22023; 5. with S. Salamanca-Riba, On the classification of unitary representations of reductive Lie groups, *Ann. of Math.* 148 (1998), 1067–1133. MR 2000d:22017.

Statement: As a young mathematician I had on many occasions an experience that most of us have shared. I was called into the office of a more senior colleague and told, “The proof you showed me yesterday was wrong.” On most of these occasions what I had said was nonsense. In the few instances that I recall most clearly, the proof was correct, and only my explanation was flawed.

These experiences once seemed to me to belong to the distant past. On reflection I realize that they are as abundant as ever, but that my role in them has changed. “The proof you told me yesterday was wrong” is now my own line, and the occasions that are difficult to remember are those in which my judgment was mistaken.

Mathematics is a beautiful and powerful collection of ways of thinking about virtually anything. Almost any change in such a wonderful entity is going to be for the worse, yet it is our business to make changes. It is entirely appropriate that our first reaction to a proposed change is to discredit it, but we must remain open to the possibility of something worthwhile, though it may appear at first to be a familiar misunderstanding. When we deal with mathematics, we balance these conflicting demands fairly well.

If the American Mathematical Society does not rise to the lofty heights of mathematics itself, there are parallels nevertheless. Some of what the Society provides (like MathSciNet) has become a central and indispensable part of doing mathematics anywhere in the world. Almost everything that the AMS does, from the selection of lecturers for meetings to its support for the employment market in mathematics, rises to that “central and indispensable” level at its best.

I hope to work for the AMS by thinking about change and by listening to suggestions for change with attitudes informed by the mathematical experiences I have mentioned. Not surprisingly, some of the areas where we mathematicians have made the greatest efforts are still the areas where the greatest efforts are required: making mathematics open to everyone, thinking about how we teach at every level, smoothing the process of finding and holding a job in mathematics. These problems are clearly unsolvable, and therefore worthy of our best efforts.

Vice President

Raymond L. Johnson



Professor of Mathematics, University of Maryland at College Park.

Born: June 25, 1943, Alice, Texas.
Ph.D.: Rice University, 1969.

AMS Committees: AMS-IMS Committee on Translations from Russian and Other Foreign Languages, 1983–1984; *Notices* Editorial Committee, 1984–1986; AMS-MAA Joint Program Committee for the Baltimore Meeting, 1991; Liaison Committee with AAAS, 1992–1994; Science Policy Committee, 1993–1996;

Task Force on Resource Needs for Excellence in Mathematics Scholarship, 1993–1999; Task Force on Participation for Underrepresented Minorities, 1995–1996.

Selected Addresses: National Association of Mathematicians, St. Louis, 1977; International Conference on Function Spaces, Gdansk, Poland, 1979.

Additional Information: **Administrative Posts:** Chair, Department of Mathematics, University of Maryland at College Park, 1991–1996. **Advisory Boards:** Board of Governors, Institute for Mathematics and Its Applications, 1993–1996; Board of Directors, National Association of Mathematicians, 1994–1996; Scientific Advisory Committee, Mathematical Sciences Research Institute, 1994–1998; Trustee, Mathematical Sciences Research Institute, 1998–2002. **Member:** AMS, AWM, MAA, NAM.

Selected Publications: 1. A survey on tent spaces and their application to weighted inequalities, *Nonlinear Analysis, Function Spaces and Applications, Vol. 3* (Litomyšl, Czechoslovakia, 1986), Teubner-Texte, 93, Teubner, Leipzig, 1986, pp. 54–68. MR **89g**:46053; 2. with J. Benedetto and H. Heinig, Fourier inequalities with A_p weights, *General Inequalities V* (W. Walter, ed.), Internat. Schriftenreihe Numer. Math., vol. 80, Birkhäuser-Verlag, Basel, 1987, pp. 217–231. MR **90k**:42015; 3. with J. Benedetto and H. Heinig, Weighted Hardy spaces and the Laplace transform II, *Math. Nachr.* **132** (1987), 29–55. MR **88m**:44001; 4. with C. Neugebauer, Homeomorphisms preserving A_p , *Rev. Mat. Iberoamericana* **3** (1987), no. 2, 249–273. MR **90d**:42013; 5. with C. Neugebauer, Change of variable results for A_p - and reverse Hölder RH_r classes, *Trans. Amer. Math. Soc.* **328** (1991), no. 2, 639–666. MR **92c**:42019.

Statement: Ensuring the long-term vitality of mathematics as a subject and profession is the primary responsibility of the American Mathematical Society. The AMS works to promote research in the mathematical sciences, while individual mathematicians must assure that their departments are well respected in the university and convince university administrators of the centrality of mathematics to the university.

The AMS must work to convince Congress and the federal government of the increasing importance of mathematics as a discipline. This is made easier by applications of mathematics to other sciences. However, there are more resources devoted to mathematics in the budgets of universities than in all of the federal agencies combined. It is critical that the Society also help mathematicians and mathematics departments convince administrations of the increasing importance of mathematics as a discipline.

This will require cooperation from mathematicians themselves. Educating undergraduates, preparing future teachers, and increasing diversity is as important to the university as our scientific research is to the federal government.

If mathematics is to thrive in the twenty-first century, special attention must be paid to increasing opportunities for women and minorities in our profession; students want to enter a vibrant, viable profession. This is an area in which I have had success. I would gladly work on an AMS effort to assist departments that choose to respond to this challenge.

Hugo Rossi

Professor of Mathematics, University of Utah.

Born: April 17, 1935, Boston, Massachusetts.

Ph.D.: Massachusetts Institute of Technology, 1960.

AMS Offices: Member at Large of the Council, 1976–1978, 1989–1991; Associate Secretary, Far Western Section, 1982–1987.

AMS Committees: *Transactions* and *Memoirs* Editorial Committee, 1975–1978; Committee on Employment and Educational Policy, 1977–1978; Committee on Science Policy, 1983–1985; Committee on the Publication Program, 1985–1989; University Lecture Series Committee, 1988–1991 (chair); Executive Committee of the Council, 1989–1992; AMS-MAA-SIAM Joint Policy Board for



Mathematics, 1990–1992 (chair); Strategic Planning Task Force, 1990–1991 (chair); Committee to Study Relations with Soviet Mathematicians, 1990–1992; Long Range Planning Committee, 1990–1991 (chair, 1991); Committee to Review Member Publications, 1992–1993 (chair); *Notices* Editorial Committee, 1995–1997 (editor); Associate Editor for Research Reports, *Bulletin*, 1999–.

Selected Addresses: International Congress of Mathematicians, Moscow, 1966; Invited Address, Annual Meeting, Las Vegas, January 1972.

Additional Information: Alfred P. Sloan Foundation Fellow, 1965–1967; Guggenheim Fellow, 1969–1970; Dean, College of Science, University of Utah, 1987–1993; Deputy Director, Math. Sci. Research Inst., 1997–1999.

Selected Publications: 1. The local maximum modulus principle, *Ann. of Math.* **72** (1960), 1–11. MR **22**:8317; 2. Continuation of subvarieties of projective varieties, *Amer. J. Math.* **91** (1969), 565–575. MR **39**:5830; 3. with M. Vergne, Équations de Cauchy-Riemann tangentielles associées à un domaine de Siegel, *Ann. Sci. École Norm. Supp.* **9** (1976), 31–80. MR **56**:3364; 4. with J. Morrow, Some general results on equivalence of embeddings, *Recent Developments in Several Complex Variables*, Ann. of Math. Stud., vol. 100, Princeton University Press, 1981, pp. 299–325. MR **83g**:32006; 5. Lebrun’s nonrealizability theorem in higher dimensions, *Duke Math. J.* **52** (1985), 457–474. MR **86i**:32027.

Statement: The AMS is the society for mathematicians with an interest in research; its mission is to satisfy that interest at all levels of intensity and to maintain the vitality of that interest. It is my belief that all mathematicians have an interest in what is happening at the frontiers of the discipline or, at the minimum, are conversant with new developments. So all mathematicians should be members of the Society. At the same time, the AMS must provide services for mathematicians at all levels: for example, providing conferences and journals where new research is presented in easily accessible form. Throughout my professional career I have been committed to this multileveled objective, be it as editor of the *Transactions* or *Bulletin* or as editor of the *Notices*. I am anxious to continue this work for the AMS.

Trustee

Andy R. Magid

George Lynn Cross Research Professor of Mathematics, University of Oklahoma.

Born: May 4, 1944, Minneapolis, Minnesota.

Ph.D.: Northwestern University, 1969.

AMS Offices: Associate Secretary, 1988–1995; Trustee, 1997–2001.

AMS Committees: Central Section Program Committee, 1988–1996; *Notices* Editorial Board, 1995–2000; *Contemporary Mathematics* Editorial Committee, 1996–; Committee on

Education, 1998–2001; Committee on Committees, 1999–; Associate Editor for Book Reviews, *Bulletin*, 2001–.

Selected Addresses: AMS Invited Address, Houston, April 1978; **AMS Special Sessions:** Commutative Algebra and Probability Groups, Eugene, June 1994; Algebraic Groups and Invariant Theory, Orlando, January 1996; Invariant Theory, Montreal, September 1997; Differential Algebra and Related Topics and Combinatorial Group Theory, New York, December 2000.

Additional Information: **Coorganizer:** (with A. Fauntleroy), Special Session on Algebraic Groups, Kalamazoo, 1975; (with R. Resco), Special Session on Universal Enveloping Algebras and Group Algebras, Norman, 1983; (with H. Bass and W. Goldman), Summer Research Conference on Geometry of Group Representations, Boulder, 1987; (with E. Armendariz, D. Lewis, and R. Zimmer), Special Session on New Doctoral Work in Mathematics, Stillwater, 1994; (with L. Small), Special Session on Algebras, Cohomology, and Polynomial Identities, Orlando, 1995.

Selected Publications: 1. *The Separable Galois Theory of Commutative Rings*, Marcel Dekker, Inc., New York, 1974. MR **50**:4563; 2. *Module Categories of Analytic Groups*, Cambridge University Press, Cambridge, 1982. MR **84j**:22008; 3. with A. Lubotzky, *Varieties of Representations of Finitely Generated Groups*, Mem. Amer. Math. Soc., vol. 336, Amer. Math. Soc., Providence, RI, 1985. MR **87c**:20021; 4. *Lectures on Differential Galois Theory*, Univ. Lecture Ser., vol. 7, Amer. Math. Soc., Providence, RI, 1994. MR **95j**:12008; 5. with C. McKnight, T. Murphy, and M. McKnight, *Mathematics Education Research: A Guide for the Research Mathematician*, Amer. Math. Soc., Providence, RI, 2000. MR **2001f**:00001.

Statement: The American Mathematical Society is simultaneously a membership organization and an important publisher of mathematics. Both roles serve the Society’s goals of advancing mathematics research. Its success as a publisher, including its MathSci services, generates revenues which allow the Society to advance mathematics through service to mathematicians and through public awareness far beyond what dues income alone would permit. It is always important for the Society to remember that the revenue so generated comes from sales to its members (individual and institutional) and to their libraries and that responsible management means keeping those sales reasonably priced. As a Trustee, I would work to see that the Society continues to balance its financial goals as a publisher with the understanding that its customers are, by and large, its members.

Carol S. Wood

Professor of Mathematics, Wesleyan University.

Born: February 9, 1945, Pennington Gap, Virginia.

Ph.D.: Yale University, 1971.

AMS Offices: Member at Large of the Council, 1987–1989.

AMS Committees: Employment Task Force, 1992–1994; Committee to Review Member Publications, 1992–1994; Nominating Committee, 1992–1994 (chair, 1993–1994); Committee to Select the Winner of the Satter Prize, 1995–1998 (chair, 1997–1998).



Additional Information: Chair of the Faculty, Wesleyan University, 2000–2001. **AWM:** President, 1991–1993; Executive Committee, 1988–1990. **MAA:** Committee on Undergraduate Program in Mathematics, 1989–1990; Chauvenet Prize Committee, 1993–1996. **ASL:** Cochair of Membership Committee, 1985–1990; Member, Executive Committee, 1998–2001; Chair, Program Committee, Logic Colloquium

2000, La Sorbonne, Paris. Mathematics Judge, Intel Science Talent Search, 1991–. **NSF:** DMS Program Officer (part-time), 1994–1996; Member, Advisory Committee, Division of Mathematical and Physical Sciences, 1997–2000. **MSRI:** Deputy Director, 1996–1997; Program Chair, Model Theory of Fields, spring 1998; Member, Board of Trustees, 1999–.

Statement: As Trustee, I would expect to participate in setting the direction of the AMS, as well as to ensure its continued health. I particularly enjoy problem solving in many venues. In serving as Trustee, I would try to build on my experiences within the research community in order to seek out what works best for mathematics now.

I would support recognition of a broad range of mathematical research, with its rich interplay with other disciplines, and would seek ways to celebrate and communicate successes. I dream that the demographic profile of mathematicians will become indistinguishable from that of our society at large; this dream informs my priorities for the profession.

Member at Large of the Council

Colin C. Adams



Francis C. Oakley Third Century Professor of Mathematics, Williams College.

Born: October 13, 1956, Tarrytown, New York.

Ph.D.: University of Wisconsin, 1983.

Selected Addresses: Low-Dimensional Topology Conference, Luminy, Marseille, France, July 1994; Geometry and Topology Conference, Technion Institute, Haifa, Israel, January 1999; AMS Special Session on Minimal Volume Maximal Cusps in Hyperbolic 3-Manifolds, Denton, May 1999; AMS Special Session on Invariants of Knots and 3-Manifolds, Washington, DC, January 2000. Korea-Japan Knot Theory Conference, Yong Pyong, Korea, August 2000.

Additional Information: MAA National Distinguished Teaching Award, 1998; MAA George Polya Lecturer, 1998–2000; Sigma Xi Distinguished Lecturer, 2000–; Member, MAA Haimo Distinguished Teaching Award Committee, 2000–; Chair, MAA Subcommittee on Undergraduate Research, 2001–.

Selected Publications: 1. with M. Hildebrand and J. Weeks, Hyperbolic invariants of knots and links, *Trans. Amer. Math. Soc.* **326** (1991), 1–56. MR **91j**:57004; 2. *The Knot Book*, W. H. Freeman and Co., New York, 1994. MR **94m**:57007; 3. Toroidally alternating knots and links, *Topology* **33** (1994), 353–369. MR **95e**:57006; 4. Unknotting tunnels in hyperbolic 3-manifolds, *Math. Ann.* **302** (1995), 177–195. MR **96c**:57004; 5. Maximal cusps, collars and systoles for hyperbolic surfaces, *Indiana Univ. Math. J.* **47** (1998), 419–437. MR **99h**:57011.

Statement: One of the key problems facing the mathematical community is the communication of the beauty and utility of mathematics to a broad audience, including legislators, press, administrators, and the general public. We must work hard to foster that communication in order to obtain the resources that mathematics deserves, as well as to attract the next generation of mathematicians.

Bruce E. Blackadar



Professor of Mathematics, University of Nevada, Reno.

Born: October 22, 1948, Nyack, New York.

Ph.D.: University of California, Berkeley, 1975.

AMS Committees: Western Section Program Committee, 1997–1998; *Transactions* and *Memoirs* Editorial Committee, 1998–2001; Committee on Academic Freedom, Tenure and Employment Security, 1999–2001.

Selected Addresses: AMS Invited Address, Claremont, November 1985; AMS Special Session on Operator Algebras, Joint AMS-LMS Meeting, Cambridge, England, June 1992; AMS Special Session on C^* -Algebras: A Fifty Year Celebration, San Antonio, January 1993; Invited Address, Conference on Operator Algebras, Shanghai, China, 1997; Invited Address, Joint U.S.-Japan Seminar on Operator Algebras, Fukuoka, Japan, 1999.

Additional Information: Forschungsstipendium, Alexander von Humboldt-Stiftung, Germany, 1982–1983; Outstanding Researcher Award, University of Nevada, Reno, 1986; Foundation Professor, University of Nevada, Reno, 1997–2000.

Selected Publications: 1. A simple unital projectionless C^* -algebra, *J. Operator Theory* **5** (1981), 63–71. MR **82h**:46076; 2. *K-Theory for Operator Algebras*, Math. Sci. Res. Inst. Publ., vol. 5, Springer-Verlag, New York, 1986. MR **88g**:46082; second edition, Cambridge University Press, Cambridge, 1998. MR **99g**:46104; 3. Symmetries of the CAR algebra, *Ann. of Math.* **131** (1990), 589–623. MR **91i**:46084; 4. with J. Cuntz, Differential Banach algebra norms and smooth subalgebras of C^* -algebras, *J. Operator Theory* **26** (1991), 255–282. MR **94f**:46094; 5. with E. Kirchberg, Generalized inductive limits of finite-dimensional C^* -algebras, *Math. Ann.* **307** (1997), 343–380. MR **98c**:46112.

Statement: Despite much attention and progress in recent years, a major enduring problem in our profession is the low level of understanding by the public (and politicians) of the nature and importance of mathematical research. We have begun making a dent in the level of ignorance and antipathy toward mathematics in our society, but more must be done. The primary function of the AMS is to promote the development of mathematics, both by providing information and communication opportunities within the profession and with related fields, and by representing the mathematical community to the society as a whole. We need to continue and expand our efforts to attract outstanding students of both traditional and non-traditional backgrounds into the subject and to proudly communicate to the public the beauty and importance of mathematics.

Sylvia T. Bozeman

Professor of Mathematics and Associate Provost for Science and Mathematics, Spelman College.

Born: August 1, 1947, Camp Hill, Alabama.

Ph.D.: Emory University, 1980.

AMS Committees: AMS-MAA Arrangements Committee for the Atlanta Meeting, 1987; AMS-AAAS-MAA Committee on Opportunities in Mathematics for Underrepresented Minorities, 1988-1992; Southeastern Section Program Committee, 1995-1996.

Selected Addresses: Colloquium of the University of North Carolina at Greensboro Department of Mathematics, 1982; Invited MAA Address, San Antonio, January 1993; The 1995 AAAS Annual Meeting and Science Innovations Exposition, Atlanta, 1995; Invited MAA Address, Southeastern Section Meeting, University of Alabama, Huntsville, 1996; Invited Lecture, Dr. Marjorie Lee Browne Colloquium, University of Michigan, Ann Arbor, 2000.

Additional Information: *National Association of Mathematicians:* Vice President, 1984-1988; Executive Board, 1993-2000; *MAA:* Board of Governors, 1989-1992; Recipient of the Distinguished College and University Teaching Award, Southeastern Section, 1995; Governor, Southeastern Section, 1997-2000; Notes Publication Committee, 1998-2000; Task Force on Guidelines for Programs and Departments in Undergraduate Mathematical Sciences, 1998-2000; Cochair, Committee on Minority Participation in Mathematics, 1990-1995; **Member:** Committee for the Award on Distinguished College and University Teaching, 1991-1996; Mathematical Sciences Education Board of the National Research Council, 1992-1995; AWM Executive Council, 1992-1996.

Selected Publications: 1. with L. Kramarz, Finite rank modifications and generalized inverses of Fredholm operators, *J. Math. Anal. Appl.* **80** (1981), 523-532. MR **82e**:47017; 2. with L. Kramarz, Approximating eigenfunctions of Fredholm operators in Banach spaces, *J. Math. Anal. Appl.* **105** (1985), 433-444. MR **86m**:47013; 3. with B. Martin, Cylindrical object identification using range data, Proceedings of the NASA HBCU Conference, Huntsville, March 1989; 4. Black women mathematicians: In short supply, *SAGE*, Vol. VI, March 1989; 5. with R. Hughes, Smoothing the transition

to graduate education, *Notices Amer. Math. Soc.*, **46** (1999), 347-348.

Statement: The AMS gives considerable attention to the development of productive research mathematicians. Its many professional development programs and its fine publication program are testimonies to this fact.

As a member of the Council, I would contribute to the analysis of AMS policy and programs and, if necessary, the expansion of AMS priorities in two areas which I believe are important to the health of the profession: (1) the establishment of a strong research community which is reflective of the diverse population of the U.S., and (2) increased attention to the decline in the number of mathematics graduate students among U.S. citizens. In addressing these issues I hope to bring the experience gained over the last fifteen years as a college administrator and codirector of a graduate bridge program. In both of these my goal has been to create a diverse mathematical community and a more diverse scientific work force. I believe that those who prepare future mathematicians and those who advance the discipline must all share responsibility for the health of the profession.



Percy A. Deift

Professor of Mathematics, Courant Institute, New York University.

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

Ph.D.: Princeton University, 1977.

AMS Committees: AMS-IMS-SIAM Committee on Joint Summer Research Conferences in the Mathematical Sciences, 1995-1998; Committee on Committees, 1995-1996; Committee to Select

the Gibbs Lecturer, 2000- (chair); St. Petersburg Travel Grants Panel, 2001 (chair).

Selected Addresses: Plenary Lecture, SIAM Annual Meeting, July 1996; Invited Address, International Congress of Mathematicians, Berlin, 1998; Plenary Speaker, Conference on Anal. and Math. Phys. in honor of Lars Gårding, Lund, August 1999; Amick Lectures, University of Chicago, April-May 2000; Gergen Lectures, Duke University, October 2001.

Additional Information: NSF Special Creativity Award, 1997-1999; Co-winner, Polya Prize, 1998; Guggenheim Fellow, 1990-2000; Member of IAMP.

Selected Publications: 1. with X. Zhou, A steepest descent method for oscillatory Riemann-Hilbert problems. Asymptotics for the MKdV equation, *Ann. of Math.* **137** (1993), 295-368. MR **94d**:35143; 2. with A. Its and X. Zhou, A Riemann-Hilbert approach to asymptotic problems arising in the theory of random matrix models, and also in the theory of integrable statistical mechanics, *Ann. of Math.* **146** (1997), 149-235. MR **98k**:47097; 3. with X. Zhou, Near integrable systems on the line. A case study— perturbation theory of the defocusing nonlinear Schrödinger equation, *Math. Res. Lett.* **4** (1997), 761-772. MR **98j**:35167; 4. with J. Baik and K. Johansson, On the distribution of the length

of the longest increasing subsequence of random permutations, *J. Amer. Math. Soc.* **12** (1999), 1119–1178. MR **2000e**:05006; 5. with T. Kriecherbauer, K. McLaughlin, S. Venakides, and X. Zhou, Uniform asymptotics for polynomials orthogonal with respect to varying exponential weights and applications to universality questions in random matrix theory, *Comm. Pure Appl. Math.* **52** (1999), 1335–1425.

Statement: My principal concerns as a Member at Large of the Council would be: (1) to maintain the level of mathematical research at U.S. institutions, (2) to provide opportunities (such as the Arnold Ross Lectures) for students across the country to learn about mathematics and the mathematical life, and (3) to provide opportunities for teachers in schools to learn new and more mathematics.

Irene M. Gamba



Professor of Mathematics, The University of Texas at Austin.

Born: February 17, 1957, Mar del Plata, Argentina.

Ph.D.: The University of Chicago, 1989.

AMS Committees: Central Section Program Committee, 2001–.

Selected Addresses: Fifth International Conference on Hyperbolic Problems, Stony Brook, NY, 1994; Minisymposium speaker, ICIAM, Hamburg, 1995; Minisymposium

speaker, ECMI, 1996; Minisymposium speaker, International Workshop of Computational Electronics, Notre Dame University, 1997; Invited Speaker, SIAM Annual Meeting, Section on Computational Methods for PDEs, 1999.

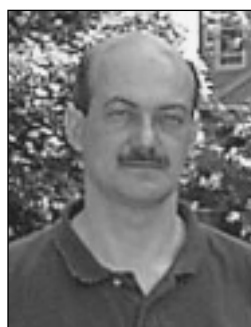
Additional Information: Conference and Seminar Organization: Coorganizer, AMS Special Session on Mathematical Problems in Transport Phenomena, Austin, October 1999; IMA Tutorial and Workshop organizer, Simulation of Transport in Transition Regimes, Minneapolis, May 2000; Minisymposium session coorganizer, Kinetic Models in Applied Sciences, SIAM Annual Meeting, Puerto Rico, July 2000. **Appointments:** NSF Mathematical Science Postdoctoral Research Fellow, Courant Institute of Mathematical Sciences, New York University, 1992–1994; Assistant Professor, Courant Institute of Mathematical Sciences, New York University, 1994–1996; Associate Professor, Courant Institute of Mathematical Sciences, New York University, 1996–1997; Professor, University of Texas at Austin, 1997–.

Selected Publications: 1. with C. Morawetz, A viscous approximation for a 2-D steady semiconductor or transonic gas dynamic flow: Existence theorem for potential flow, *Comm. Pure Appl. Math.* **49** (1996), 999–1049. MR **97g**:35169; 2. Sharp uniform bounds for steady potential fluid-Poisson systems, *Proc. Roy. Soc. Edinburgh Sect. A* **127** (1997), 479–516. MR **98j**:35152; 3. with A. Bobylev and J. Carrillo, On some properties of kinetic and hydrodynamic equations for inelastic interactions, *J. Statist. Phys.* **98** (2000), 743–773. MR **2001c**:82063; 4. with J. Carrillo and C. Shu, Computational macroscopic approximations to

the one-dimensional relaxation-time kinetic system for semiconductors, *Phys. D* **146** (2000), 289–306; 5. with A. Jüngel, Positive solutions to singular second and third order differential equations for quantum fluids, *Arch. Ration. Mech. Anal.* **156** (2001), 183–203.

Statement: The American Mathematical Society has a fundamental role in promoting mathematical research and support in the whole international mathematical community. At a time when new technologies are dramatically changing the mathematical landscape, it is essential that our community gets engaged in interdisciplinary research by pursuing new ideas and developing new tools that will allow scientific breakthroughs. This applies particularly to the field of rigorous modeling of new phenomena and to the validation of these models. All disciplines within mathematics are going to be needed.

Henri A. Gillet



Professor of Mathematics, University of Illinois at Chicago.

Born: July 8, 1953, Tangiers, Morocco.

Ph.D.: Harvard University, 1978.

AMS Committees: *American Journal of Mathematics*, Society's Representative, 1994 (chair).

Selected Addresses: AMS Invited Address, Chicago, May 1989; Number Theory Section, International Congress of Mathematicians, Kyoto, 1990.

Additional Information: AMS Special Session on K -Theory, Chicago, March 1985 (organizer); Alfred P. Sloan Foundation Fellow, 1986–1989; AMS Special Session on Arithmetic Geometry and Intersection Theory, Chicago, May 1989 (organizer); *American Journal of Mathematics*, 1994–1999 (editor); AMS Summer Research Institute on Algebraic Geometry, Santa Cruz, July 1995 (organizing committee); *International Mathematics Research Notices*, 1995–1997 (editor); Head, Department of Mathematics, Statistics, and Computer Science, University of Illinois at Chicago, 1995–2001; AMS-IMS-SIAM Joint Summer Research Conference on Algebraic K -Theory, Seattle, July 1997 (organizing committee).

Selected Publications: 1. Riemann-Roch theorems for higher algebraic K -theory, *Adv. in Math.* **40** (1981), 203–289. MR **83m**:14013; 2. with C. Soulé, Intersection theory using Adams operations, *Invent. Math.* **90** (1987), 243–277. MR **89d**:14005; 3. with P. Shalen, Dendrology of groups in low Q -ranks, *J. Differential Geom.* **32** (1990), 605–712. MR **92b**:57003; 4. with C. Soulé, An arithmetic Riemann-Roch theorem, *Invent. Math.* **110** (1992), 473–543. MR **94f**:14019; 5. with C. Soulé, Descent, motives and K -theory, *J. Reine Angew. Math.* **478** (1996), 127–176. MR **98d**:14012.

Statement: The mathematical community is currently faced with a remarkable combination of opportunities and challenges. On the positive side, there is a strong market for mathematicians in many areas (e.g., finance, consulting, and cryptography), there have been best-selling books about

math topics, and considerable attention is being paid to K-12 mathematics education. As the former head of a highly diverse mathematical sciences department, I am strongly aware of the benefits both of interdisciplinary activities and of a strong presence for the mathematical community in mathematics education, though I also believe that we should not be slaves to fashion. On the negative side, we are faced with a major challenge: federal support for mathematical sciences is anemic, and the new president's proposed budget, which is not favorable to basic science, does not augur well for the future. The AMS therefore has a critical role to play by educating decision makers, the public, and potential students of both the value of a mathematics education and of funding mathematical research. It is also extremely important, within the current funding environment, that as innovative methods are tried to fund mathematical sciences and education, funding of individual researchers should not be forgotten.

David R. Morrison



James B. Duke Professor of Mathematics and Physics, Duke University.

Born: July 29, 1955, Oakland, California.

Ph.D.: Harvard University, 1980.

AMS Committees: Committee on the Publication Program, 1994.

Selected Addresses: Six AMS Special Sessions, 1981-1990; Invited Address, Mathematical Society of Japan, Tokyo, 1985; AMS Invited

Address, Lexington, March 1994; Invited Address, International Congress of Mathematicians, Zurich, 1994; Invited Address, AAAS, Philadelphia, 1998.

Additional Information: AMS Centennial Fellowship, 1992-1994; Steering Committee, Institute for Advanced Study/Park City Mathematics Institute, 1995-; IMU Committee on Electronic Information and Communication, 1998-; **Member:** AAAS, AAUP, American Physical Society, MAA, Mathematical Society of Japan, Sigma Xi; **Editorial Boards:** *Advances in Theoretical and Mathematical Physics*, *New York Journal of Mathematics*.

Selected Publications: 1. Semistable degenerations of Enriques' and hyperelliptic surfaces, *Duke Math. J.* **48** (1981), 197-249. MR **82m**:14020; 2. On $K3$ surfaces with large Picard number, *Invent. Math.* **75** (1984), 105-121. MR **85j**:14071; 3. Mirror symmetry and rational curves on quintic threefolds: A guide for mathematicians, *J. Amer. Math. Soc.* **6** (1993), 223-247. MR **93j**:14047; 4. with B. Greene and A. Strominger, Black hole condensation and the unification of string vacua, *Nuclear Phys. B* **451** (1995), 109-120. MR **96m**:83085; 5. with P. Deligne, P. Etingof, D. Freed, L. Jeffrey, D. Kazhdan, J. Morgan, and E. Witten (eds.), *Quantum Fields and Strings: A Course for Mathematicians*, Vols. 1 and 2, Amer. Math. Soc., Providence, RI, 1999. MR **2000e**:81010.

Statement: The AMS has several key roles to play in today's society: (1) The AMS should be a major player in science policy discussions with legislators and government officials, ensuring that the collective voice of mathematicians is heard; (2) The AMS should play a leadership role in bringing together disparate segments of the mathematics community (pure and applied, researchers and educators, college and K-12), with the goal of promoting productive interaction among these groups; (3) The AMS should be a model publisher, publishing in a cost-effective manner and helping to develop open standards such as $\text{T}_\text{E}\text{X}$ and Unicode which will smooth the transition from a paper literature to an electronic one.

Douglas C. Ravenel



Professor of Mathematics, University of Rochester.

Born: February 17, 1947, Alexandria, Virginia.

Ph.D.: Brandeis University, 1972.

Selected Addresses: International Congress of Mathematicians, Helsinki, 1978; Bourbaki Seminar, Paris, 1990; AMS Workshop for New Chairs, New Orleans, January 2001.

Additional Information: Alfred P. Sloan Foundation Fellow, 1977-1981; Department Chair, University of Rochester, 1996-

Selected Publications: 1. *Complex Cobordism and Stable Homotopy Groups of Spheres*, Pure Appl. Math., vol. 121, Academic Press, Orlando and New York, 1986. MR **87j**:55003; 2. *Nilpotence and Periodicity in Stable Homotopy Theory*, Ann. of Math. Stud., vol. 128, Princeton University Press, Princeton, 1992. MR **94b**:55011; 3. Rochester four years later: From crisis to opportunity, *Notices Amer. Math. Soc.* **46** (1999), 861-863.

Statement: Our community is at an interesting point in its history. The importance of mathematics is being increasingly recognized in this technological age, and the NSF has made increased funding for our discipline its top priority. At the same time, mathematics, like higher education in general, is under increasing financial and curricular pressure. Careful attention to instructional issues appears to be our best response.

My experience with the Rochester crisis of 1995-96 brought these issues into stark relief. My department was initially targeted for severe cutbacks, including the elimination of its graduate program, but with moral and tactical support from the AMS we were able to persuade our administration to modify its course. Improvements in our undergraduate program since then have made us a source of institutional pride.

As a Council member I would encourage the AMS to enhance its recent programs to increase awareness of these issues and to support the efforts of department chairs and other leaders to respond to them in constructive ways.

Frank Sottile



Assistant Professor of Mathematics, University of Massachusetts at Amherst.

Born: March 18, 1963, Grosse Pointe, Michigan.

Ph.D.: University of Chicago, 1994.

Selected Addresses: MSRI Workshop on Symmetric Functions and Representation Theory, Berkeley, 1997; Invited Address, MSRI Workshop on Solving Systems of Equations, Berkeley, 1998; Invited Address, Computational Commu-

tative Algebra VI, Torino, Italy, 1999; Invited Address, Effective Methods in Algebraic Geometry, Bath, England, 2000; AMS Invited Address, Hoboken, April 2001.

Additional Information: Churchill Scholar and NSF Graduate Fellow, Cambridge University, England, 1985–1988; Editorial Board, *Concerns of Young Mathematicians*, 1994–1999; Visiting Assistant Professor, University of Toronto, 1995–1998, and University of Wisconsin-Madison, 1999–2000; MSRI Postdoctoral Fellow, 1996–1997, and autumn 1998; Long-Term Visitor, Université de Genève, IRMA Strasbourg, and IRMAR, Rennes; Organizing Committee, Formal Power Series and Algebraic Combinatorics, The Fields Institute, Toronto, 1998; Steering Committee, Effective Methods in Algebraic Geometry, 2003, Kaiserlautern, Germany. **Member:** AMS, AWM, SIAM, YMN.

Selected Publications: 1. with W. Fulton, R. MacPherson, and B. Sturmfels, Intersection theory on spherical varieties, *J. Algebraic Geom.* **4** (1995), 181–193. MR **95j**:14004; 2. Enumerative geometry for the real Grassmannian of lines in projective space, *Duke Math. J.* **87** (1997), 59–85. MR **99a**:14079; 3. with N. Bergeron, Schubert polynomials, the Bruhat order, and the geometry of flag manifolds, *Duke Math. J.* **95** (1998), 373–423. MR **2000d**:05127; 4. with N. Bergeron, Hopf algebras and edge-labeled posets, *J. Algebra* **216** (1999), 641–651. MR **2000e**:16033; 5. Real rational curves in Grassmannians, *J. Amer. Math. Soc.* **13** (2000), 333–341. MR **2000j**:14080.

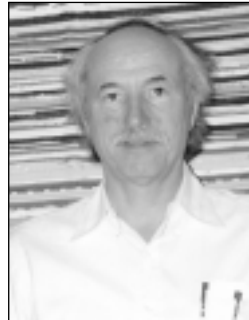
Statement: Mathematics currently enjoys some encouraging circumstances. Demographic change is finally leading to improvements in the academic job market, new funding initiatives support our research, and—hard as it is to believe—mathematics has even captured the imagination of popular culture. (Witness the play *Proof* and movies *A Beautiful Mind* (coming soon), *Good Will Hunting*, and π .) We know this attention and support is warranted as mathematics continues to be vital to the technologies that drive economic progress.

This fortuitous situation is, however, fragile, and our profession faces additional challenges. While the AMS has limited power to effect change, it does play an important role in leadership and outreach. We certainly need to preserve recent gains, effectively communicating the value and excitement of our research to the government and to the general public. Another serious challenge is the attraction and development of the next generation of mathematical scientists. This is complicated by the memory of the recent

job market, the trend toward longer postdoctoral careers, and the changing nature of American society.

If elected as your representative to the AMS Council, I will work vigorously to ensure that our society continues to run well, represents its membership, and imaginatively faces new challenges as they arise.

W. Stephen Wilson



Professor of Mathematics, The Johns Hopkins University.

Born: November 11, 1946, Iowa City, Iowa.

Ph.D.: Massachusetts Institute of Technology, 1972.

Selected Addresses: AMS Invited Address, Duluth, 1978; Main Speaker, CBMS Regional Conference, SUNY-Albany, 1980; 46th Annual Japanese Topology Symposium, Hokkaido University, 1999.

Additional Information: Alfred P. Sloan Foundation Research Fellow, 1977–1979; The Johns Hopkins University Homewood Student Council Award for Excellence in Teaching, 2000.

Selected Publications: 1. with H. Miller and D. Ravenel, Periodic phenomena in the Adams-Novikov spectral sequence, *Ann. of Math.* (2) **106** (1977), 469–516. MR **56**:16626; 2. *Brown-Peterson Homology: An Introduction and Sampler*, CBMS Regional Conf. Ser. in Math., vol. 48, Conference Board of the Mathematical Sciences, Washington, DC, 1982. MR **83j**:55005; 3. with J. Boardman and D. Johnson, Unstable operations in generalized cohomology, *Handbook of Algebraic Topology* (I. James, ed.), North-Holland, Amsterdam, 1995, pp. 687–828. MR **97b**:55022; 4. with D. Ravenel and N. Yagita, Brown-Peterson cohomology from Morava K -theory, *K-Theory* **15** (1998), 147–199. MR **2000d**:55012; 5. Hopf rings in algebraic topology, *Expo. Math.* **18** (2000), 369–388.

Statement: A primary focus of the American Mathematical Society is, as it should be, mathematical research. The Society should also be involved with the broader spectrum of concerns of professional mathematicians. These include issues relating to mathematics education from K-12 through graduate school, jobs for mathematicians, research funds, attracting more graduate students, and diversifying our graduate programs and faculty. The American Mathematical Society must do its best to influence government policy on these and other issues. A corollary is the need for a strong Washington presence for the American Mathematical Society in constant contact with policymakers at the National Science Foundation and in the legislature.

Nominating Committee

Alejandro Adem

Professor of Mathematics, University of Wisconsin-Madison.

Born: November 24, 1961, Mexico City, Mexico.

Ph.D.: Princeton University, 1986.



AMS Committees: AMS-IMS-SIAM Committee on Joint Summer Research Conferences in the Mathematical Sciences, 1997–2000; AMS-SMM Joint Program Committee, Mexico Meeting, 2000–2001.

Selected Addresses: Plenary Lecture, Conference on Topology and Its Connections to Geometry and Modular Representation Theory, Evanston, 1992; Plenary Lecture, AMS Summer Institute on Cohomology of Groups, Seattle, July 1996; AMS Invited Address, Columbia, November 1996; Plenary Lecture, Midwest Topology Seminar, Bloomington, 2000; Plenary Lecture, Singapore International Symposium on Geometry and Topology, 2001.

Additional Information: Alfred P. Sloan Doctoral Dissertation Fellowship, 1985; NSF Young Investigator Award, 1992; Romnes Faculty Fellowship, Wisconsin Alumni Research Foundation, 1995; Chair, Department of Mathematics, University of Wisconsin-Madison, 1999–.

Selected Publications: 1. with W. Browder, The free rank of symmetry of $(S^n)^k$, *Invent. Math.* **92** (1988), 431–440. MR **89e**:57034; 2. Characters and K -theory of discrete groups, *Invent. Math.* **114** (1993), 489–514. MR **95j**:55006a; 3. with R. J. Milgram, *Cohomology of Finite Groups*, Grundlehren Math. Wiss., vol. 309, Springer-Verlag, Berlin, 1994. MR **96f**:20082; 4. Recent developments in the cohomology of finite groups, *Notices Amer. Math. Soc.* **44** (1997), 806–815. MR **98j**:20077; 5. with D. Karagueuzian and J. Mináč, On the cohomology of Galois groups determined by Witt rings, *Adv. Math.* **148** (1999), 105–160. MR **2001b**:12010.

Statement: The AMS plays a critical role in promoting mathematical research and education. On both fronts we are facing important challenges. As chair of a large department I am very much aware of the decisive impact that key individuals may have on committees and other organizational jobs. The Nominating Committee must strive to identify highly qualified and motivated candidates with an interest in serving the entire mathematical community.

Sheldon Axler



Chair and Professor, Mathematics Department, San Francisco State University.

Born: November 6, 1949, Philadelphia, Pennsylvania.

Ph.D.: The University of California, Berkeley, 1975.

AMS Offices: Member at Large of the Council, 1990–1992.

AMS Committees: Committee to Monitor Problems in Communication, 1987–1989; AMS-MAA Joint Program Committee for the

Phoenix Meeting, 1989 (chair); AMS-MAA Joint Program Committee for the Boulder Meeting, 1989 (chair); Committee to Review Member Publications, 1992–1994; Committee on Copyright Policy, 1992–1993; *Notices* Editorial

Committee, 1993–1994; Publications Committee, 1993–1994; Committee on Academic Freedom, Tenure, and Employment Security, 1995–1997.

Selected Addresses: AMS Special Session on Bergman Spaces, Baltimore, January 1992; AMS Special Session on Operator Theory and Operator Algebras, Dayton, October 1992; AMS Special Session on Holomorphic Spaces, San Francisco, January 1995; AMS Special Session on Operator Theory and Function Spaces, Milwaukee, October 1997; AMS Special Session on Banach Spaces of Analytic Functions, San Antonio, January 1999.

Additional Information: Editor in Chief, *Mathematical Intelligencer*, 1987–1991; Cochair, AMS Summer Research Conference on Bergman Spaces, July 1994; MAA Lester R. Ford Award for expository writing, 1996.

Selected Publications: 1. Factorization of L^∞ functions, *Ann. of Math.* **106** (1977), 567–572. MR **57**:1127; 2. Multiplication operators on Bergman spaces, *J. Reine Angew. Math.* **336** (1982), 26–44. MR **84b**:30052; 3. The Bergman space, the Bloch space, and commutators of multiplication operators, *Duke Math. J.* **53** (1986), 315–332. MR **87m**:47064; 4. *Linear Algebra Done Right*, Undergrad. Texts Math., second edition, Springer-Verlag, New York, 1997. MR **98i**:15001; 5. with P. Bourdon and W. Ramey, *Harmonic Function Theory*, Grad. Texts Math., vol. 137, second edition, Springer-Verlag, New York, 2001.

Statement: The Nominating Committee finds candidates for key officers of the Society, including president-elect (ultimately president), vice president, trustee, and member-at-large of the Council. As a member of the Nominating Committee, I would seek candidates who could effectively promote the missions of the American Mathematical Society: to support mathematical research, to increase the public's understanding of the value of mathematics, and to foster excellence in the teaching of mathematics. To help meet the challenges currently facing the AMS, the Nominating Committee should recommend outstanding candidates reflecting the diverse membership of the Society.

Robert M. Fossum



Professor, University of Illinois at Urbana-Champaign; Affiliate, Beckman Institute.

Born: May 1, 1938, Northfield, Minnesota.

Ph.D.: The University of Michigan, 1965.

AMS Offices: Associate Secretary, 1984–1987; Secretary, 1989–1998; Former Secretary, 1999–2000.

AMS Committees: *Proceedings* Editorial Committee, 1974–1977; Committee to Select Hour Speakers

for Central Sectional Meetings, 1984–1987; *Abstracts* Editorial Committee, 1984–1987, 1989–1998 (chair); Ad Hoc Committee on the Proposed Structure of the Joint Policy Board for Mathematics, 1986–1987; AMS-MAA Arrangements Committee for the San Antonio Meeting, 1987; Ad Hoc Committee on NCTM Standards, 1989; Ad Hoc

Committee to Review the Procedures of the Council in Considering Issues, 1989; Committee on Vending Software, 1989 (chair); Committee on the Publication Program, 1989-1994; Agenda and Budget Committee, 1989-1998; AMS-MAA Joint Meetings Committee, 1989-1998 (chair: 1992, 1994, 1996, 1998); AMS-MAA-SIAM Joint Administrative Committee, 1989-1998 (chair); Committee on Agenda for Business Meetings, 1989-1998 (chair); Committee on Committees, 1989-1998; Committee on Long Range Planning, 1989-1998; Committee on Meetings and Conferences, 1989-1998; Committee on National Awards and Public Representation, 1989-1998; Executive Committee of the Council, 1989-1998; Liaison Committee, 1989-1998; *Notices* Editorial Committee, 1989-1994 (chair), 1995-1998 (associate editor); Program Committee for National Meetings, 1989-1998; Nominating Committee Scheduling Committee, 1990 (chair); AMS-London Mathematical Society Joint Program Committee, 1990-1992 (chair); Committee to Select the Winner of the Public Service Award, 1990-1992 (chair, 1990); Liaison Committee with Deutsche Mathematiker Vereinigung, 1990-1993; AMS-MAA Committee on Summer Meetings, 1991-1992; AMS-MAA Committee on Cooperation, 1991-1998; Subcommittee to Study Committee Structure, 1992; Ad Hoc Committee on Nominating Procedures, 1992-1993; Committee on Publications, 1992-1998; AMS-Sociedad Math. Mexicana Joint Program Committee, 1993; Committee on Special 100th Meeting Celebration, 1993; Committee on Meetings of the Council, 1993-1994 (chair); Subcommittee on Summer Meetings, 1993-1996; Committee on Education, 1993-1998; Committee on the Profession, 1993-1998; Committee on Science Policy, 1993-1998; Search Committee for Executive Director, 1994; Task Force on AMS Conferences, 1994; AMS-IMU Joint Program Committee, 1994-1995; AMS-MAA Exhibits Advisory Subcommittee, 1994-1998 (chair, 1997-1998); Blue Ribbon Committee for World Mathematical Year 2000, 1994-1999; AMS-MAA-SIAM Joint Policy Board for Mathematics, 1996-1997; Search Committee for AMS Secretary, 1996-1997 (consultant); Search Committee for the Editor of *Notices*, 1996-1997 (co-chair, 1997); AMS-Nordic Joint Program Committee, 1998-2000; AMS Representative to AAAS, 1998-2000; Liaison Committee with AAAS, 1998-2000; AMS-MAA Joint Archives Committee, 1998-2001; Committee on Archives, 1998-2001.

Selected Addresses: AMS Invited Address, Bloomington, Indiana, April 1980; Numerous special sessions.

Additional Information: Det Kongelig Norske Videnskabers Selskab (The Royal Norwegian Society of Science and Letters), Elected 1994; Fellow, American Association for the Advancement of Science (AAAS), Elected 2000. **Member:** Association for Computing Machinery (ACM); Dansk Matematisk Forening; European Mathematical Society; IEEE Computer Society; Institute for Algebraic Meditation (secretary); International Association of Mathematical Physics; New York Academy of Sciences; Society for the Advancement of Scandinavian Studies (SASS); Society for Industrial and Applied Mathematics (SIAM); T_EX Users Group (TUG); UIUC Senate Chair, 2001-2002.

Selected Publications: 1. with L. Claborn, Class groups of n -Noetherian rings, *J. Algebra* **10** (1968), 263-285. MR

39:5541; 2. with L. Claborn, Generalizations of the notion of class group, *Illinois J. Math.* **12** (1968), 228-253. MR 37:200; 3. Vector bundles over spheres are algebraic, *Invent. Math.* **8** (1969), 222-225. MR 40:3537; 4. *The Divisor Class Group of a Krull Domain*, *Ergeb. Math. Grenzgeb.*, Band 74, Springer-Verlag, New York-Heidelberg, 1973. MR 52:3139; 5. with W. Haboush, The cohomology algebra of a commutative group scheme, *Trans. Amer. Math. Soc.* **339** (1993), 553-565. MR 93m:14041.

Statement: The Nominating Committee identifies the leaders of the AMS by nominating candidates for member at large of the Council, vice president, president-elect, and trustee. It is vital that candidates selected represent the broad cross section of the general membership of the Society. The candidates who are elected are called upon to set policy for the Society, exercise fiduciary responsibilities, and represent the Society and mathematics in many and diverse settings. As a member of the Nominating Committee, I hope to help identify and put forth candidates from all sections of the Society who we believe will excel as officers of the Society in the same manner as they have excelled as mathematicians and citizens of the mathematical community.

As a former secretary of the Society, I know the duties of each position and will be able to help the Nominating Committee in its task of identifying candidates who are suitable for the vacant positions.

Jane Hawkins



Professor of Mathematics, University of North Carolina at Chapel Hill.

Born: October 27, 1954.

Ph.D.: University of Warwick, 1981.

AMS Offices: Member at Large of the Council, 1998-2000.

AMS Committees: Committee on Science Policy, 1998-2000.

Selected Addresses: AMS Invited Address, Tuscaloosa, March 1992; Sonya Kovalevsky High School Mathematics Day Keynote Address,

North Dakota State University, 1999; AMS Special Session on Ergodic Theory and Dynamical Systems, Lowell, April 2000; AMS Special Session on Ergodic Theory and Dynamical Systems, Toronto, September 2000; Leonard Sulski Memorial Mathematics Lecture, College of the Holy Cross, 2001.

Additional Information: Assistant Professor, State University of New York at Stony Brook, 1980-1986; Visiting Member, MSRI, 1984; Visiting Assistant Professor, California Institute of Technology, 1986-1987; University of North Carolina Chancellor's Award for Instructional Technology, 1998; Faculty Member for NSA-Sponsored Summer Program for Women in Mathematics, George Washington University, 1999-2001.

Selected Publications: 1. with K. Schmidt, On C^2 -diffeomorphisms of the circle which are of type III₁, *Invent. Math.* **66** (1982), 511-518. MR 84g:58069; 2. Rohlin factors,

product factors, and joinings for n -to-one maps, *Indiana Univ. Math. J.* **42** (1993), 237–258. MR **94h**:28012; 3. Amenable relations for endomorphisms, *Trans. Amer. Math. Soc.* **343** (1994), 169–191. MR **94g**:28027; 4. with H. Bruin, Examples of expanding C^1 maps having no σ -finite invariant measure equivalent to Lebesgue, *Israel J. Math.* **108** (1998), 83–107. MR **2000i**:37051; 5. with H. Bruin, Exactness and maximal automorphic factors of unimodal interval maps, *Ergodic Theory Dynam. Systems*, to appear.

Statement: Officers of the American Mathematical Society represent the wide variety of interests of the membership. Professional mathematicians are located at colleges, universities, and industries of all sizes throughout North America, and their roles run the gamut from fundamental research to recruitment of capable undergraduates into the profession to the incorporation of technology into our curriculum. The Society's officers should be attuned to the trends in federal funding, interdisciplinary activities, and the training of the future mathematical and scientific work force. The role of the Nominating Committee is to listen to its electors, perform a wide search, and present qualified officer candidates for election by the AMS membership.

Michael Starbird



University Distinguished Teaching Professor and Professor of Mathematics, University of Texas at Austin.

Born: July 10, 1948.

Ph.D.: University of Wisconsin, 1974.

AMS Offices: Member at Large of the Council, 1998–2001.

AMS Committees: Meetings and Conferences Committee, 1998–2001.

Selected Addresses: AMS Invited Address, Norman, March 1983; Invited Address, MAA Regional Meeting, San Diego, 1983; AMS Special Session on the Evolving Undergraduate Mathematics Curriculum, Stillwater, October 1994; Christie Lecture, Mathematics for Future Lawyers, Legislators, and Business Leaders, MAA Northeastern Section Fall Meeting, Springfield, 1997; Mathematics 2000 Colloquium, The Ohio State University, October 2000; Invited Address, MAA Mathfest, Madison, 2001.

Additional Information: Visiting Member, Institute for Advanced Study, 1978–1979; Minnie Stevens Piper Professor (awarded to ten professors each year in the state of Texas), 1984; President's Associates Teaching Excellence Award, 1989; UT Recreational Sports Super Racquets Champion, 1989; Associate Dean, College of Natural Sciences, University of Texas at Austin, 1989–1997; Member of the Board, Mathematicians and Education Reform (MER) Network, 1992–; MER Task Force on the Departmental Network, 1993–; Jean Holloway Award for Teaching Excellence, 1995; Chad Oliver Plan II Teaching Award, 1997; Member, Academy of Distinguished Teachers, 1998–; Friar Society Centennial Teaching Fellowship, 2000.

Selected Publications: 1. with M. Rudin, Products with a metric factor, *General Topology and Appl.* **5** (1975), 235–248. MR **52**:1606; 2. Cell-like, 0-dimensional decompositions of E^3 , *Trans. Amer. Math. Soc.* **249** (1979), 203–216. MR **80h**:57016; 3. with R. Denman, Shrinking countable decompositions of S^3 , *Trans. Amer. Math. Soc.* **276** (1983), 743–756. MR **84f**:57004; 4. with F. Ancel, The shrinkability of Bing-Whitehead decompositions, *Topology* **28** (1989), 291–304. MR **90g**:57014; 5. with E. Burger, *The Heart of Mathematics: An Invitation to Effective Thinking*, Key College Publishing in cooperation with Springer-Verlag, New York, 2000.

Statement: The future vitality of the mathematics profession will be determined largely by decisions made by non-mathematicians. When I was associate dean, I attended a meeting at which nationally prominent deans were asked to describe their departments of mathematics. “Insular” was the word most commonly used by the other deans. They described their mathematics departments as largely uninterested in strategic planning, general education, or connections with other departments. I am keenly aware of the perceptions of mathematics held by faculty members in other departments, by administrators, by donors, and by the nonacademic community. We mathematicians must learn how to listen to these external voices and better meet their needs, and we have made some progress recently in this direction. Mathematics is exciting, useful, and one of the ongoing, crowning achievements of human thought—an expanding adventure for all people. This outward-looking perspective shapes ideas on funding of research and teaching, revisions of graduate and undergraduate curricula, outreach activities, inclusion of underrepresented populations, and building an infrastructure for systematically bringing mathematical research activity within the grasp of many. Mathematics has far more to give the whole society than we have traditionally offered. This philosophy would inform my contributions to the Nominating Committee.

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; Advisory Committee on Former Soviet Union Mathematics, 1992–1995; Centennial Fellowships Committee, 1994–1996; Special Donations of Publications Committee, 1996–1997 (chair); Committee on Committees, 1997–1998 (chair); Committee on Science Policy, 1998–2000.

Selected Addresses: AMS Invited Address, Claremont, October 1978; Invited Address, International Congress of

Mathematicians, Warsaw, 1983; AMS Invited Address, International Joint Mathematics Meetings of the AMS and the Sociedad Matemática 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 & Sciences; National Academy of Sciences.

Selected Publications: 1. 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; 2. with S. R. S. Varadhan, *Multidimensional Diffusion Processes*, Springer-Verlag, Berlin and New York, 1979. MR 81f:60108; 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. Systems Theory* 14 (1981), 141–171. MR 84d:60092b; 4. *Probability Theory, an Analytic View*, Cambridge University Press, Cambridge, 1993. MR 95f:60003; 5. *An Introduction to the Analysis of Paths on a Riemannian Manifold*, Mathematical Surveys and Monographs, vol. 74, Amer. Math. Soc., Providence, RI, 2000.

Statement: I believe that the community of research mathematicians in the U.S. should have a voice and that the AMS should be that voice. My selection of candidates would reflect this belief.

Editorial Boards Committee

Clifford J. Earle



Professor of Mathematics, Cornell University.

Born: November 3, 1935, Racine, Wisconsin.

Ph.D.: Harvard University, 1962.

AMS Offices: Council Representative, *Proceedings* Editorial Committee, 1997–2001.

AMS Committees: *Proceedings* Editorial Committee, 1989–2001 (chair and managing editor, 1997–2001).

Selected Addresses: Numerous special sessions at regional or national AMS meetings, 1968–1995; AMS Invited Address, New York, April 1973.

Selected Publications: 1. with J. Eells, A fibre bundle description of Teichmüller theory, *J. Differential Geom.* 3 (1969), 19–43. MR 43:2737a; 2. with R. Hamilton, A fixed point theorem for holomorphic mappings, *Global Analysis*, Proc. Sympos. Pure Math., vol. XVI (Berkeley, CA, 1968), Amer. Math. Soc., Providence, RI, 1970, pp. 61–65. MR 42:918; 3. with A. Douady, Conformally natural extension of homeomorphisms of the circle, *Acta Math.* 157 (1986), 23–48. MR 87j:30041; 4. with C. McMullen, Quasiconformal isotopies, *Holomorphic Functions and Moduli, Vol. I*, Math. Sci. Res. Inst. Publ., vol. 10, Springer, New York, 1988, pp. 143–154. MR 89h:30028; 5. with F. Gardiner, Teichmüller

disks and Veech's \mathcal{F} -structures, *Extremal Riemann Surfaces*, Contemp. Math., vol. 201, Amer. Math. Soc., Providence, RI, 1997, pp. 165–189. MR 97k:32031.

Statement: Producing high-quality journals is one of the most important activities of the AMS, and maintaining the quality of the journals requires continual recruiting of good editors. During my four years as managing editor of the *Proceedings*, I found that the Editorial Boards Committee can provide very useful suggestions and advice in the recruiting process, helping to make sure that no good candidates are overlooked. If elected, I will work to maintain the high quality of the journals and their editorial committees.

Benson S. Farb



Professor of Mathematics, University of Chicago.

Born: October 25, 1967.

Ph.D.: Princeton University, 1994.

Selected Addresses: Cornell Topology Festival, May 1995; International Conference on Non-positive Curvature in Group Theory, Topology and Geometry, Vanderbilt, May 1998; Borel (“Swiss”) Seminar (3-lecture series), Neuchatel, June 2000; Groups and Low-Dimensional Topology (3-lecture minicourse),

CRM, Montreal, July 2000; AMS Invited Address, Toronto, September 2000.

Additional Information: Editorial Boards/Service: Managing Editor (with R. Zimmer), *Geometriae Dedicata*; Editorial Board, Chicago Lectures in Mathematics Series, University of Chicago Press; Coorganizer: Geometric and Topological Aspects of Group Theory, MSRI, May 2000. **Selected Awards:** NSF CAREER Award, 2000–2005; Alfred P. Sloan Foundation Fellowship, 1999–2001.

Selected Publications: 1. with R. Dennis, *Noncommutative Algebra*, Grad. Texts in Math., vol. 144, Springer-Verlag, New York, 1993. MR 94j:16001; 2. with A. Eskin, Quasi-flats and rigidity in higher rank symmetric spaces, *J. Amer. Math. Soc.* 10 (1997), 653–692. MR 98e:22007; 3. with L. Mosher, Quasi-isometric rigidity for the solvable Baumslag-Solitar groups. II, *Invent. Math.* 137 (1999), 613–649; I, *Invent. Math.* 131 (1998), 419–451. MR 99b:57003; 4. with P. Shalen, Real-analytic actions of lattices, *Invent. Math.* 135 (1999), 273–296. MR 2000c:22017; 5. with L. Mosher, On the asymptotic geometry of abelian-by-cyclic groups, *Acta Math.* 184 (2000), 145–202. MR 2001e:20035.

Robert Friedman

Professor of Mathematics, Columbia University.

Born: April 15, 1955, Boston, Massachusetts.

Ph.D.: Harvard University, 1981.

Selected Addresses: Clifford Lectures, Tulane University, New Orleans, 2000.

Selected Publications: 1. Global smoothings of varieties with normal crossings, *Ann. of Math.* 118 (1983), 75–114.

MR 85g:32029; 2. with J. Morgan, *Smooth Four-Manifolds and Complex Surfaces*, *Ergeb. Math. Grenzgeb.* 3, vol. 27, Springer-Verlag, Berlin-Heidelberg-New York, 1994. MR 95m:57046; 3. with Z. Qin, On complex surfaces diffeomorphic to rational surfaces, *Invent. Math.* 120 (1995), 81-117. MR 96d:57032; 4. with J. Morgan and E. Witten, Principal G -bundles over elliptic curves, *Math. Res. Lett.* 5 (1998), 97-118. MR 99j:14037; 5. with J. Morgan and E. Witten, Vector bundles over elliptic fibrations, *J. Algebraic Geom.* 8 (1999), 279-401. MR 2000b:14053.

Svetlana Jitomirskaya



Professor of Mathematics, University of California, Irvine.

Born: June 4, 1966, Kharkov, Ukraine.

Ph.D.: Moscow State University, 1991.

Selected Addresses: XI International Congress of Mathematical Physics, Paris, July 1994; Plenary Address, International Conference on Differential Equations and Mathematical Physics, GATECH, Atlanta, March 1997; AMS Invited

Address, Santa Barbara, March 2000; XIII International Congress of Mathematical Physics, London, July 2000; Invited Address, International Congress of Mathematicians, Beijing, 2002.

Selected Publications: 1. with B. Simon, Operators with singular continuous spectrum. III. Almost periodic Schrödinger operators, *Comm. Math. Phys.* 165 (1994), 201-205. MR 97a:47003; 2. Anderson localization for the almost Mathieu equation: A nonperturbative proof, *Comm. Math. Phys.* 165 (1994), 49-57. MR 95i:81045; 3. with A. Gordon, Y. Last, and B. Simon, Duality and singular continuous spectrum in the almost Mathieu equation, *Acta Math.* 178 (1997), 169-183. MR 98f:47041; 4. with Y. Last, Power-law subordinacy and singular spectra. I. Half-line operators, *Acta Math.* 183 (1999), 171-189. MR 2001a:47033; 5. Metal-insulator transition for the almost Mathieu operator, *Ann. of Math.* 150 (1999), 1159-1175. MR 2000k:81084.