Biographies of Candidates 2010

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

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

Candidates have had the opportunity to supply a photograph to accompany their biographical information. Candidates with an asterisk (*) beside their names were nominated in response to a petition.

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

Vice-President Anthony Michael Bloch



Alexander Ziwet Collegiate Professor of Mathematics, Department of Mathematics, University of Michigan.

Born: February 28, 1955, Johannesburg, South Africa.

Ph.D.: Harvard University, 1985. **Selected Addresses:** Plenary Address, SIAM National Meeting, Kansas City, 1996; Invited Series of Lectures in IIIe Cycle, Romand de Mathématiques, Les Diablerets.

Switzerland, 2000; Plenary Address, XV International Workshop on Geometry and Physics, Tenerife, Spain, 2006; Invited Address, AMS meeting, Huntsville, Alabama, October, 2008; Invited series of lectures, International Summer School on Geometry, Mechanics and Control, Amettla Del Mar, Spain, 2009.

Additional Information: Presidential Young Investigator Award, 1991; Guggenheim Fellowship, 1996; Member, Institute for Advanced Study, 1997; Fellow of the IEEE, 2003; Chair, Department of Mathematics, University of Michigan, 2005–2008; Senior Fellow, Michigan Society of Fellows, 2010–; Editorial Boards include: SIAM Journal on Control and Optimization, 1993–1999, Journal of Nonlinear Science, 2001–, Dynamical Systems, 2002–, Journal of Geometric Mechanics, 2009–; Participating Institutions Council, Institute for Mathematics and its Applications, 2005–2008.

Selected Publications: 1. with R. W. Brockett and T. S. Ratiu, A new formulation of the generalized Toda lattice equations and their fixed point analysis via the momentum map, *Bull. Amer. Math. Soc. (N.S.)*, **23** (1990), No. 2,

477-485. MR1027895 (91e:58067); 2. with H. Flaschka and T. S. Ratiu, A Schur-Horn-Kostant convexity theorem for the diffeomorphism group of the annulus, *Invent. Math.*, 113 (1993), No. 3, 511-529. MR1231835 (94i:58063); 3. with D. Zenkov, Invariant measures of nonholonomic flows with internal degrees of freedom, *Nonlinearity*, 16 (2003), No. 5, 1793-1807. MR1999579 (2004e:37100); 4. with F. Adams, Hill's equation with random forcing terms, *SIAM J. Appl. Math.*, 68 (2008), No. 4, 947-980. MR2390975 (2008m:34064); 5. with V. Brinzanescu, A. Iserles, J. E. Marsden and T. S. Ratiu, A class of integrable flows on the space of symmetric matrices, *Comm. Math. Phys.*, 290 (2009), No. 2, 399-435. MR2525626.

Statement: It would be an honor to foster, support and extend the role that the American Mathematical Society plays in mathematical research, education, and outreach. It is important for the AMS to encourage research in pure and applied areas, to offer support for education at all levels, and to convey the vitality of mathematics to the academic and research community at large, and to the wider public. Mathematics is a wonderful intellectual endeavor which plays a key role in science and technology and everyday life. My goal would be to continue and extend the fine contributions that the AMS makes to the development of mathematics in all these areas.

Barbara Lee Keyfitz

Dr. Charles Saltzer Professor of Mathematics, The Ohio State University, Columbus, OH.

Born: November 7, 1944.

Ph.D.: New York University, 1970.

AMS Committees: Co-chair, organizing committee, Joint Summer Research Conference on Current Progress in Hyperbolic Systems: Riemann Problems and Computations, Bowdoin, Maine, July, 1988; Editorial Board, *Proc. Amer.*



Math. Soc., 1988–1992; Committee on Summer Institutes and Special Symposia, 1989–1992; Nominating Committee, 1990–1992 (Chair, 1991); Ad Hoc Committee on the Applications of Mathematics, 1990–1992; Coordinating Editor, Proc. Amer. Math. Soc., 1992–1994; Task Force on Excellence in Mathematics Scholarship, 1992–1999; AMS Representative to AMS-SIAM-IMS Committee on Joint Summer

Research Conferences, 1994-1997 (Chair, 1996-1997), SIAM Representative, 1998-2003; Committee on Centennial Fellowships, 1995-1997; Editorial Board, Trans. Amer. Math. Soc., 1998–2002; Co-organizer, with Kevin Payne, of Special Session on Partial Differential Equations of Mixed Elliptic-Hyperbolic Type and Applications, AMS Sectional Meeting, Penn State University, 2009; Member, Committee to Select the Winner of the Steele Prize, 2010-2013; Mathematical Reviews Editorial Committee, 2010–2014. Selected Addresses: Krieger-Nelson Prize Lecture, CMS Summer Meeting, Waterloo, 2005; Invited Speaker, Conference on Advances in PDE in honor of the eightieth birthdays of Peter Lax and Louis Nirenberg, Toledo, Spain, 2006; Invited Speaker, International Congress on Industrial and Applied Mathematics, Zurich, 2007; Karen Ames Lecture Series talk, University of Alabama, Huntsville, 2009; Plenary Speaker, EWM Conference, Novi Sad, 2009.

Additional Information: Fellow of AAAS, 1992; Krieger-Nelson Prize, Canadian Mathematical Society, 2005; Esther Farfel Award, University of Houston, 2006; Honorary Doctor of Mathematics Degree, University of Waterloo, 2010; SIAM Fellow, 2010.

Selected Publications: 1. Solutions with shocks, an example of an L^1 -contractive semi-group, Comm. Pure Appl. Math., 24 (1971), 125-132. MR0271545 (42 #6428); 2. with H. C. Kranzer, A system of nonstrictly hyperbolic conservation laws arising in elasticity theory, Arch. Rational Mech. Anal., 72 (1979/1980), No. 3, 219-241. MR**0549642 (80k:35050)**; 3. with M. Golubitsky, A qualitative study of the steady-state solutions for a continuous flow stirred tank chemical reactor, SIAM J. Math. Anal., 11 (1980), No. 2, 316-339. MR**0559872 (82i:80010)**; 4. with G. M. Lieberman and S. Canić, A proof of existence of perturbed steady transonic shocks via a free boundary problem, Comm. Pure Appl. Math., 53 (2000), No. 4, 484-511. MR1733695 (2001m:76056); 5. with E. H. Kim and S. Canić, A free boundary problem for a quasi-linear degenerate elliptic equation: regular reflection of weak shocks, Comm. Pure Appl. Math., 55 (2002), No. 1, 71-92. MR1857880 (2003a:35206).

Statement: It is an honor to be asked to run for the position of Vice President. I hope to be able to contribute by listening carefully, making fair decisions, and working towards inclusiveness and excellence.

Trustee Avner Friedman



Distinguished University Professor, Department of Mathematics, Ohio State University.

Born: November 19, 1932.

Ph.D.: Hebrew University, 1956.

AMS Committees: Member at Large of the Council, 1968–1969. Selected Addresses: AMS/Canada Summer Conference, Vancouver, 1993; International Congress on Industrial and Applied Mathematics (ICIAM). Edinburgh. 1999:

Petrowski Conference, Moscow, 2004; Annual British Joint Mathematics-Applied Mathematics Conference, Liverpool, 2005; Joint Society for Mathematical Biology and Chinese Society for Mathematical Biology (SMB/CSMB) International Conference, Hangzhou, China, 2009.

Additional Information: Sloan Fellowship, 1962–1965; Guggenheim Fellowship, 1966–1967; NSF Special Creativity Award, 1983–1985, 1991–1993. Elected to American Academy of Arts and Sciences, 1987–; National Academy of Science, 1993–; Spain Academy of Science, 1998–.

Selected Publications: 1. Fundamental solutions for degenerate parabolic equations, Acta Math., 133 (1974), 171-217. MR**0481551 (58 #1665)**; 2. On the free boundary of a quasivariational inequality arising in a problem of quality control, Trans. Amer. Math. Soc., 246 (1978), 95-110. MR**0515531 (80f:93086c)**; 3. with E. DiBenedetto, The ill-posed Hele-Shaw model and the Stefan problem for supercooled water, Trans. Amer. Math. Soc., 282 (1984), No. 1, 183-204. MR0728709 (85g:35121); 4. with F. Reitich, Quasi-static motion of a capillary drop. II. The three-dimensional case, J. Differential Equations, 186 (2002), No. 2, 509-557. MR1942220 (2003m:35197); 5. with B. Hu, Stability and instability of Liapunov-Schmidt and Hopf bifurcation for a free boundary problem arising in a tumor model, Trans. Amer. Math. Soc., 360 (2008), No. 10, 5291-5342. MR2415075 (2009d:35353).

Statement: The Board of Trustees manages the business affairs and sets the fiscal policy of the Society. But it also needs to look for new resources, especially at current times of economic stress. I believe I can contribute to the mission of the Board, with my experience which includes serving on the Board of Trustees of SIAM (1990–1995), serving as Director of two mathematical institutes, the Institute of Mathematics and its Applications (1987–1997), and the Mathematical Biosciences Institute (2001–2008); Chair of the Board of Mathematical Sciences (1994–1997); and President of SIAM (1993–1995) and of the Society of Mathematical Biology (2007–2009). These experiences involved balancing budgets with attention to scientific and scholar priorities, but also identifying new resources in government, foundations, and industry.

William H. Jaco



Regents Professor and Grayce B. Kerr Chair, Department of Mathematics, Oklahoma State University. **Born:** July 14, 1940.

Ph.D.: University of Wisconsin-Madison, 1968.

AMS Committees: Committee to Select Hour Speakers (Midwest Section), 1978-1980 (Chair, 1979-1980); Committee on Committees, 1985-1989 (Chair, 1987-1989); Joint Meetings Committee,

1988–1995 (Ex-officio); Long Range Planning Committee, 1988–1995 (Ex-officio); Committee to Monitor Problems in Communication, 1988–1993 (Ex-officio); Committee on Science Policy, 1988–1998; Committee on Education, 1990–1995 (Ex-officio); Committee on Meetings and Conferences, 1993–1995 (Ex-officio); Committee on the Profession, 1993–1995 (Ex-officio); Committee on Publications, 1993–1995 (Ex-officio); Federal Policy Committee, 1995–1997 (Chair); Subcommittee on Professional Development of Graduate Students, 1996–1999; Committee on Graduate/Postdoctoral Education, 1996–1999; Committee on Fellows, 2003–2004; Liaison Committee with AAAS, 2003–2010 (Chair, 2009–2010); Task Force on Prizes, 2009–2010 (Chair).

Selected Addresses: AMS Invited One-Hour Address, Blacksburg, VA, 1975; CBMS Regional Research Conference (Principle Lecturer), Blacksburg, VA, 1977; International Mathematical Union Lectures (6 lectures), University of Geneva (Switzerland), 1981; Summer School (10 lectures), University of Peking, Beijing, China, 2004; AMS Invited One-Hour Address, Tallahassee, FL, 2004.

Additional Information: National Science Foundation Graduate Fellowship, 1964–1967; National Science Foundation Postdoctoral Fellowship, 1971–1972; Member, Board on Mathematical Sciences, National Research Council, National Academy of Sciences, 1987–1990; Executive Director, AMS, 1988–1995; Member, American Institute of Mathematics Advisory Board, 1994–2010; Fellow, AAAS, 1998–; AAAS Steering Committee, Section A. Mathematics, 2007–2010 (Chair, 2008–2009); Regents Professor, Oklahoma State University, 2008–; AAAS Council Member, 2009–2010.

Selected Publications: 1. Finitely presented subgroups of 3-manifold groups, *Invent. Math.*, **13** (1971), 335–346. MR0300279 (45 #9325); 2. with J. Hempel, Fundamental groups of 3-manifolds which are extensions, *Ann. of Math.* (2), **95** (1972), 86–98. MR0287550 (44 #4754); 3. with P. Shalen, Seifert fibered spaces in 3-manifolds, *Mem. Amer. Math. Soc.*, **21** (1979), No. 220, viii+192 pp. MR539411 (81c:57010); 4. with U. Oertel, An algorithm to decide if a 3-manifold is a Haken manifold, *Topology*, **23** (1984), No. 2, 195–209. MR0744850 (85j:57014); 5. with J. H. Rubinstein, 0-efficient triangulations of 3-manifolds, *J. Differential Geom.*, **65** (2003), No. 1, 61–168. MR2057531 (2005d:57034).

Statement: The Trustees of the AMS have the responsibility to oversee the business and financial affairs of the Society. As Executive Director of the Society (1988–1995),

I had the primary executive responsibility for the business and finances of the Society. This experience gives me unique familiarity with those aspects of the Society that fall under the responsibility of a Trustee. During my tenure as Executive Director, Mathematical Reviews joined the central administrative structure under the Executive Director and began its successful electronic delivery of Mathematical Reviews (MathSci Net), the AMS held its first long-range planning, establishing the five standing policy committees (Science, Education, Profession, Publications, and Meetings), the Washington Office was founded, which today plays a central role in Federal Science Policy, and the Society lead a campaign for support of Russian mathematics and mathematicians during the breakup of the former Soviet Union. I am pleased that the member and staff leadership of the Society continue to support and strengthen these initiatives. As a Trustee I would strive to protect the financial stability of the Society while continuing its enviable record of support to mathematical research and scholarship and to the mathematics profession. I greatly enjoyed my tenure as Executive Director and am honored with the opportunity to stand for election as a Trustee and to have the chance to serve the Society in this capacity.

Member at Large

Adebisi Agboola



Professor of Mathematics, University of California, Santa Barbara. **Born:** August 11, 1964, Ogbomoso, Nigeria.

Ph.D.: Columbia University, 1991. **AMS Committees:** Centennial Fellowship Committee, 2009–2010. **Selected Addresses:** Conference on "Integral Galois structures", Irsee, Germany, 1993; Conference on "*p*-adic representations in arithmetic", Anogia, Greece, 1998;

Conference on "Stark's conjectures and related topics", Baltimore, 2002; Conference on "Open questions and recent developments in Iwasawa theory, in honor of Ralph Greenberg's 60th birthday", Boston, 2005; Conference "Iwasawa 2010", Toronto, 2010.

Additional Information: NSF Postdoctoral Research Fellow, 1991–1994. Member: MSRI, 1991–1992; Institute for Advanced Study, 1995–1996; CIRM Montreal, Fall, 2005.

Selected Publications: 1. with M. J. Taylor, Class invariants of Mordell-Weil groups, *J. Reine Angew. Math.*, 447 (1994), 23–61. MR1263168 (95k:11142); 2. Torsion points on elliptic curves and Galois module structure, *Invent. Math.*, 123 (1996), No. 1, 105–122. MR1376248 (97a:11178); 3. On primitive and realisable classes, *Compositio Math.*, 126 (2001), No. 1, 113–122. MR1827865 (2002a:11125); 4. with B. Howard (and with an appendix by K. Rubin), Anticyclotomic Iwasawa theory of CM elliptic curves, *Ann. Inst. Fourier*, 56 (2006), No. 4, 1001–1048. MR2266884 (2009b:11098); 5. On Rubin's variant of the *p*-adic Birch and Swinnerton-Dyer conjecture, *Compositio Math.*, 143 (2007), No. 6, 1374–1398. MR2371373 (2009d:11101).

Statement: The primary purpose of the AMS is to foster the development of mathematics by promoting the professional interests of mathematicians. I would be honored to be able to make a contribution to the Society by serving as a Member at Large of the Council.

Matthew Ando



Associate Professor, Department of Mathematics, University of Illinois at Urbana-Champaign.

Born: April 3, 1968, Philadelphia, PA, USA.

Ph.D.: Massachusetts Institute of Technology, 1992.

Selected Addresses: International Conference on algebraic topology, Gdansk, Poland, 2001; International Conference on algebraic geometry and topology, Canberra,

Australia, 2003; Abel Symposium, Oslo, 2007.

Additional Information: Invited long-stay visitor, Isaac Newton Institute, Cambridge, 2002; Invited organizer, conference on elliptic cohomology, Fields Institute, Toronto, 2004; Invited visitor, MSRI, 2006.

Selected Publications: 1. with M. Hopkins and N. Strickland, Elliptic spectra, the Witten genus, and the theorem of the cube, *Invent. Math.*, **146** (2001), No. 3, 595–687. MR**1869850** (2002g:55009); 2. The sigma orientation for analytic circle-equivariant elliptic cohomology, *Geom. Topol.*, **7** (2004), 91–153. MR**1988282** (2004d:55006); 3. with N. Ganter and C. French, The Jacobi orientation and the two-variable elliptic genus, *Algebr. Geom. Topol.*, **8** (2008), No. 1, 493–539. MR**2443236** (2009g:55006); 4. with A. Blumberg and D. Gepner, Twists of *K*-theory and TMF, to appear in *Proc. Symp. Pure Math.*

Statement: Two striking features of mathematics, compared to lab sciences, are the breadth of the research community and the relatively low cost of the typical mathematician's research program. These features should be a source of strength in the current difficult economic climate, but they are not automatically so. Institutions of higher education—particularly public institutions—face simultaneously increasing enrollment and declining public investment, resulting in substantial pressure to focus precious limited resources on superstars and adjuncts. Funding agencies such as the NSF have helped with postdocs, but have not directly affected tenure-track positions. The AMS should support our historical breadth, for example by articulating its importance to decision-makers at all levels. A primary goal should be to promote the hiring of tenure-track faculty in mathematics and to support the careers of those tenure-track faculty. Broad-based intellectual foment is the habitat in which great mathematical discoveries have emerged for decades. In addition, our breadth plays an important role in the renewal of our community, and in the recruitment of the next generation of scientists and engineers. As research and teaching go hand in hand, so hiring tenure-track research mathematicians has a salutary effect not only on research but also on instruction and recruitment.

Estelle Basor



Deputy Director, American Institute of Mathematics, Palo Alto, CA. **Born:** October 23, 1947, Watsonville, CA, USA.

Ph.D.: University of California, Santa Cruz, 1975.

Selected Addresses: Invited Talk, International Conference on Toeplitz Matrices, Pobershau, Germany, 2001; Three Lectures, Random Matrix Approaches in Number Theory, Newton Institute, Cam-

bridge, 2004; Plenary Talk, International Workshop on Operator Theory, Williamsburg, VA, 2008; Invited Talk, Northern California, Nevada, and Hawaii Section of the MAA, San Francisco, CA, 2010.

Additional Information: Professor Emeritus, California Polytechnic State University, San Luis Obispo, 1976–2008; Member of the AWM, 1976–; Selection Committee for AWM-NSF Travel Grants, 1996–1999; Member of MSRI, 1999; Member of the Newton Institute, 2004; Member of the SAMSI scientific committee for Program on High Dimensional Inference and Random Matrices, 2006–2007; Co-Organizer Special Session, AMS regional meeting, Recent Developments in Random Matrix Theory, Tucson, Arizona, 2007; Co-Organizer for the workshop Random Matrices, Related Topics and Applications, Parent program: Probabilistic Methods in Mathematical Physics CRM, Montreal, 2008.

Selected Publications: 1. A localization theorem for Toeplitz determinants, *Indiana Univ. Math. J.*, 28 (1979), 975-983. MR**0551161 (81e:47029)**; 2. Distribution functions for random variables for ensembles of positive Hermitian matrices, Comm. Math. Phys., 188 (1997), 327-350. MR1471817 (99b:82046); 3. with T. Ehrhardt, Asymptotic formulas for the determinants of symmetric Toeplitz plus Hankel matrices, Toeplitz Matrices and Singular Integral Equations (Pobershau, 2001), 61-90, Oper. Theory Adv. Appl., 135, Birkhäuser, Basel, 2002. MR1935758 (2003h:47049); 4. with H. Widom, Wiener-Hopf determinants with Fisher-Hartwig symbols, Oper. Theory Adv. Appl., 147 (2004), 131-149. MR2053687 (2005c:47031); 5. with T. Ehrhardt, Asymptotics of block Toeplitz determinants and the classical dimer model, Comm. Math. Phys., 274 (2007), No. 2, 427-455. MR2322911 (2008j:47067). **Statement:** The strength of the AMS has always been its ability to promote the highest quality research. As a Member at Large I will work to maintain and promote excellence in research and in all other areas important to the health of the mathematical community. These areas include the teaching of mathematics, making mathematics an inclusive activity, and promoting mathematical outreach activities. It is especially important given the current financial crisis that the AMS provide assistance to graduate students seeking employment, provide affordable journals and books, and continue to encourage the public awareness of the importance of mathematics.

Wilfrid Gangbo



Professor of Mathematics, School of Mathematics, Georgia Institute of Technology, Atlanta, Georgia.

Born: May 11, 1961, Porto-Novo, Benin.

Ph.D.: École Polytechniques Fédérales de Lausanne, Switzerland, 1992.

AMS Committees: Committee on Human Rights of Mathematicians, 2009–2011; SIAG/Activity Group on Analysis of PDEs, 2009–2011.

Selected Addresses: Plenary Address, AMS meeting, New York University, 2003; Plenary Address, SIAM Conference on Analysis of PDEs, Houston, 2004; ICMS, Edinburgh, UK, 2007; Variational Methods for Nonlinear PDE, Technion, Israel, 2008; Pacific NorthWest Seminar, Vancouver, Canada, 2009.

Additional Information: National Academy of Sciences, 11th Annual Frontiers of Science Symposium, 1999; Membership: MSRI, 1994–1995, 2005; IPAM, 2008; CNRSvisiting Professor at ENS-Paris, ENS-Lyon, Paris Dauphine, 2002; Program Organized: IPAM, Spring 2008; Editorial Boards: Communication in Mathematical Sciences, 2007–, Journal on Mathematical Analysis, 2008–, Network and Heterogeneous Media, 2008–, European Series in Applied and Industrial Mathematics: Control, Optimisation and Calculus of Variations, 2009–; Selected Conferences Organized: "Optimal Mass Transport and its Applications", MSRI, 2005, "SIAM Conference on Analysis of PDEs", Miami FL, 2009.

Selected Publications: 1. with R. McCann, The geometry of optimal transportation, *Acta Math.*, 177 (1996), No. 2, 113–161. MR1440931 (98e:49102); 2. with L. C. Evans, Differential equations methods for the Monge-Kantorovich mass transfer problem, *Mem. Amer. Math. Soc.*, 137 (1999), No. 653, 1–66. MR1464149 (99g:35132); 3. with E. Carlen, Constrained steepest descent in the 2-Wasserstein metric, *Ann. of Math. (2)*, 157 (2003), No. 3, 807–846. MR1983782 (2004c:49027); 4. with M. Cullen and G. Pisante, Semigeostrophic equations discretized in reference and dual variables, *Arch. Ration. Mech. Anal.*, 185 (2007), No. 2, 341–363. MR2317792 (2009a:76037); 5. with L. Ambrosio, Hamiltonian ODEs in the Wasserstein space of probability measures, *Comm. Pure Appl. Math.*, 61 (2008), No. 1, 18–53. MR2361303 (2009b:37101).

Statement: Mathematics is recognized as a vital part of science. However, it seems that its current funding level leaves out a group of people worth supporting. It seems that the European funding level is catching up very fast to the American one and may surpass it soon. How far are we from the point where this could have a long-term impact on research and education? Could AMS play a role and propose remedies? It will be an honor to serve as an AMS Member at Large and be involved in such issues.

Ira M. Gessel



Professor and Chair, Department of Mathematics, Brandeis University.

Born: April 9, 1951, Philadelphia, PA, USA.

Ph.D.: Massachusetts Institute of Technology, 1977.

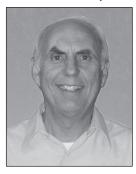
Selected Addresses: AMS Joint Summer Research Conference on *q*-Series, Combinatorics and Computer Algebra, Mount Holyoke College, 1998; 50th Séminaire Lo-

tharingien de Combinatoire, 2003; CombinaTexas, Texas A&M University, 2004; Diagonally Symmetric Polynomials and Applications, Centro Internacional de Encuentros Matemáticos, Castro-Urdiales, Spain, 2007; Canadian Mathematical Society, Ottawa, 2008.

Selected Publications: 1. Multipartite *P*-partitions and inner products of skew Schur functions, in *Combinatorics and Algebra* (Boulder, Colo., 1983), *Contemp. Math.*, vol. 34, Amer. Math. Soc., Providence, RI, 1984. pp. 289–317. MR0777705 (86k:05007); 2. with G. Viennot, Binomial determinants, paths and hook length formulae, *Adv. Math.*, 58 (1985), No. 3, 300–321. MR0815360 (87e:05008); 3. Symmetric functions and *P*-recursiveness, *J. Combin. Theory Ser. A*, 53 (1990), 257–285. MR1041448 (91c:05190); 4. with C. Reutenauer, Counting permutations with given cycle structure and descent set, *J. Combin. Theory Ser. A*, 64 (1993), No. 2, 189–215. MR1245159 (95g:05006); 5. Applications of the classical umbral calculus, *Algebra Universalis*, 49 (2003), no. 4, 397–434. MR2022347 (2004k:05029).

Statement: The AMS supports the mathematics profession in many ways: with publishing, organizing meetings, advocacy for mathematics funding, and informing the public of the importance of mathematics in our society. In these financially challenging times, with a tight job market and diminished resources at colleges and universities, the role of the AMS in our profession is more important than ever. As a Member at Large of the Council, I would do my best to support the good work that the AMS does.

Lawrence F. Gray



Professor, School of Mathematics, University of Minnesota.

Born: May 25, 1949, Santa Monica, California, USA.

Ph.D.: Cornell University, 1977.

AMS Committees: Committee on Education, 2007- (Chair, 2009); Committee on Science Policy, 2009-; Liaison Committee with AAAS, 2010-.

Selected Addresses: "Rigorous techniques for analyzing CA traffic

models", ICIAM, 2007, Zurich; "A new coupling for particle jump models", IMS, 2010, Gothenburg.

Additional Information: Honored Fellow of the Institute of Mathematical Statistics.

Selected Publications: 1. with B. Fristedt, *A Modern Approach to Probability Theory*, Birkhäuser Boston Inc., Boston, MA, 1997. MR1422917 (98e:60002); 2. with D. Griffeath, The ergodic theory of traffic jams, *J. Statist. Phys.*, 105 (2001), No. 3-4, 413-452. MR1871652 (2002j:60169); 3. A mathematician looks at Wolfram's new kind of science, *Notices Amer. Math. Soc.*, 50 (2003), No. 2, 200-211. MR1951106.

Statement: The world of mathematics that we all know and love as members of the AMS is naturally dominated by research and other scholarly activities. But beyond these vital pursuits, there is much else of value that we have to offer to the rest of the world, due to our unique perspectives as mathematicians. In recent years, much of my energy has been directed towards reaching out to and working with those that are concerned with K-12 mathematics including public school teachers, mathematics education researchers, state education departments, and state legislators. There are other forms of outreach as well, and I believe these should be priorities for the AMS.

Patricia Hersh



Associate Professor of Mathematics, North Carolina State University.

Born: May 24, 1973, Saginaw, Michigan, USA.

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

Selected Addresses: Plenary Talk, Trends in Topological Combinatorics Conference, KTH-Stockholm, Sweden, 2005; Plenary Talk, CombinaTexas Conference, El Paso,

Texas, 2008; Virginia Tech Math Departmental Colloquium, Blacksburg, Virginia, 2009; UBC Math Departmental Colloquium, Vancouver, Canada, 2010; Plenary Talk, Southeast Lie Theory Conference, Athens, Georgia, 2010.

Additional Information: 1994 Alice T. Schafer Prize runner-up; NSF Postdoctoral Research Fellowship, 2001–2004; Ruth I. Michler Memorial Prize winner, 2010–2011; AWM Mentoring Travel Grant Selection Committee; Triangle Lectures in Combinatorics (TLC) Regional Conference Series Organizing Committee; FPSAC Conference Program Committees for 21st and 24th annual conferences; 5 AMS special sessions co-organized; postdoctoral positions at the University of Washington, 1999–2001, the University of Michigan, 2001–2004, and MSRI, Fall, 2004; faculty member at Indiana University–Bloomington, 2004–2009; Institute for Math and its Applications (IMA), long-term visitor, Spring, 2007.

Selected Publications: 1. Chain decomposition and the flag *f*-vector, *J. Combin. Theory Ser. A*, **103** (2003), No. 1, 27–52. MR**1986829** (**2004e**:**06003**); 2. with P. Hanlon, Multiplicity of the trivial representation in rank-selected homology of the partition lattice, *J. Algebra*, **266** (2003), No. 2, 521–538. MR**1995126** (**2004e**:**05206**); 3. with E. Babson, Discrete Morse functions from lexicographic orders, *Trans. Amer. Math. Soc.*, **357** (2005), 509–537. MR**2095621** (**2006d**:**05185**); 4. with S. Hsiao, Random walks on

quasi-symmetric functions, *Adv. Math.*, **222** (2009), No. 3, 782–808. MR**2553370**; 5. Shelling Coxeter-like complexes and sorting on trees, *Adv. Math.*, **221** (2009), No. 3, 812–829. MR**2511039**.

Statement: The AMS is well-positioned to help the mathematics community grapple with changing economic conditions through the thoughtful creation of new programs. Of utmost importance is the health of the mathematical pipeline. Also very important is travel. The careers of many well-deserving individuals and the continued vitality of mathematical research depend on these. I believe the AMS council should focus considerable energy right now on these priorities. Increased NSF support for regional conferences and/or a more extensive AMS travel grants program could help at a time when many schools are cutting travel funding.

I've had the opportunity to spend time at several research universities and institutes. I see real differences in how they are run—from the structure of graduate programs to the role of lecturers in teaching classes. Now is a critical time for good ideas to be devised and shared. I would welcome the opportunity to participate in this process.

Tara S. Holm



Associate Professor of Mathematics, Cornell University.

Born: Pittsburgh, PA, USA.

Ph.D.: Massachusetts Institute of Technology, 2002.

Selected Addresses: "Act globally, compute locally: Localization in symplectic geometry", Plenary Address, AMS Eastern Sectional Meeting, 2007; "Dance of the Astonished Topologist", Women in Math Celebration, MIT, 2008; "The

K-theory of symplectic orbifolds", Combinatorial, Enumerative and Toric Geometry workshop, MSRI, 2009; "Symplectic reduction in stages and orbifold invariants", Colloque Paulette Libermann, Institut Henri Poincaré, 2009; "Moment polytopes and the connections between symplectic and discrete geometry", Formal Power Series and Algebraic Combinatorics, 2010.

Additional Information: NSF Postdoctoral Fellowship, 2002–2005; AIM Project NExT Fellow, 2006–2007; Coorganizer for Cornell Topology Festival, 2006–; NSF Disciplinary Grant in Geometric Analysis, 2006–2010; NSF Conference grant in Topology and Geometric Analysis, 2008–2009; NSF Conference grant in Topology, 2009–2012; Local co-organizer for upcoming AMS Eastern Sectional Meeting at Cornell University, 2011; (Co)organizer of 8 conferences and workshops in symplectic geometry.

Selected Publications: 1. with R. Goldin and L. Jeffrey, Distinguishing the chambers of the moment polytope, *J. Symplectic Geom.*, **2** (2003), No. 1, 109–131. MR**2128390** (**2005j:53093**); 2. with J.-Cl. Hausmann and V. Puppe, Conjugation spaces, *Algebr. Geom. Topol.*, **5** (2005), 923–964. MR**2171799** (**2006e:55008**); 3. with M. Harada and A. Henriques, Computation of generalized

equivariant cohomologies of Kac-Moody flag varieties, *Adv. Math.*, **197** (2005), No. 1, 198–221. MR**2166181** (**2006h:53086**); 4. with R. Goldin and A. Knutson, Orbifold cohomology of torus quotients, *Duke Math. J.*, **139** (2007), No. 1, 89–139. MR**2322677** (**2008h:53144**); 5. with R. Sjamaar, Torsion and abelianization in equivariant cohomology, *Transform. Groups*, **13** (2008), No. 3-4, 585–615. MR**2452608** (**2009j:57041**).

Statement: The AMS plays several vital roles in the support of mathematics research and education. As mathematicians, we frequently see the Society's influence in terms of publishing mathematical research and reviews of mathematical research. Perhaps more important, though, is its role as advocate for mathematics, to the government, to funding agencies and to the public at large. If elected to the Council, I pledge to do my utmost for the mathematics community, with particular attention to 1. advocating and lobbying for governmental and non-governmental funding for mathematics, from research to education at all levels; 2. employment and funding opportunities for recipients of new and recent Ph.D.s in mathematics; 3. promoting diversity in the mathematics community, broadly defined to include students and mathematicians outside of academia; 4. encouraging all talented students to pursue mathematics, and ensuring opportunities for all; and 5. dissemination and publication of mathematical research on the arXiv, on the Internet and in journals, at a reasonable cost.

Alice Silverberg



Professor, University of California, Irvine.

Born: October 6, 1958, New York, New York, USA.

Ph.D.: Princeton University, 1984. **AMS Offices:** Member at Large of the Council, 1995–1998.

AMS Committees: Centennial Fellowship Committee, 1993–1995 (Chair, 1994–1995); Committee on Meetings and Conferences, 1995–1996; Committee on Publications,

1996–1998; Travel Grants Evaluation Panel, 2000; Committee on Committees, 2000–2003; Program Committee for National Meetings, 2005–2008; Program Committee for the AMS-MAA Joint Mathematics Meetings, 2005–2006, 2007–2008; Cole Prize Committee, 2007–2008.

Selected Addresses: Plenary Address, Australian Mathematical Society Annual Meeting, Sydney, Australia, 1989; I. A. and Fannie R. Barnett Lecture, University of Cincinnati, 1995; Invited Hour Address, AMS meeting, Kent, Ohio, 1995; Invited Hour Address, AMS meeting, Annandale-on-Hudson, NY, 2005; Invited Address, MAA MathFest, 2009.

Selected Publications: 1. Mordell-Weil groups of generic abelian varieties, *Invent. Math.*, **81** (1985), No. 1, 71–106. MR**0796192 (87b:11046)**; 2. with K. Rubin, A report on Wiles' Cambridge lectures, *Bull. Amer. Math. Soc. (N.S.)*, **31** (1994), No. 1, 15–38. MR**1256978 (94k:11062)**; 3. with Yu. G. Zarhin, Polarizations on abelian varieties and self-dual l-adic representations of inertia groups, *Compositio Math.*,

126 (2001), No. 1, 25-45. MR1827860 (2002f:11066); 4. with K. Rubin, Ranks of elliptic curves, *Bull. Amer. Math. Soc. (N.S.)*, 39 (2002), No. 4, 455-474. MR1920278 (2003f:11080); 5. with K. Rubin, Compression in finite fields and torus-based cryptography, *SIAM J. Comput.*, 37 (2008), No. 5, 1401-1428. MR2386274 (2009d:94101). Statement: If elected to the Council, my primary interests would be to work towards equal opportunity, fairness, and openness in our profession, and making information widely accessible, in order to fulfill the AMS's mission of furthering mathematical research and scholarship.

T. Christine Stevens



Professor of Mathematics and Computer Science, Saint Louis University, Saint Louis, MO.

Born: December 1, 1948, Hagerstown, Maryland, USA.

Ph.D.: Harvard University, 1978. **Selected Addresses:** Special Session on the History of Mathematics, Phoenix, Arizona, 2004; Plenary Address, KAIST International Symposium on Enhancing University Mathematics Teaching,

Daejeon, South Korea, 2005; Keynote Address, Canadian Mathematics Education Study Group, Fredericton, New Brunswick, 2007; James R. C. Leitzel Lecture, MAA Mathfest, Madison, Wisconsin, 2008.

Additional Information: AMS/MAA/SIAM Congressional Science Fellow, 1984-1985; NSF program officer in teacher enhancement, 1987-1989; Co-director (1994-1998) and Director (1998-2009) of Project NEXT (MAA); Fellow of AAAS, 2005; current and past service on committees of AAAS, AWM, MAA, and SIAM, including MAA Science Policy Committee, SIAM Education Committee, and MAA Committee on Minority Participation in Mathematics.

Selected Publications: 1. Weakening the topology of a Lie group, *Trans. Amer. Math. Soc.*, **276** (1983), No. 2, 541–549. MR0688961 (84e:22010); 2. Connectedness of complete metric groups, *Colloq. Math.*, **50** (1986), No. 2, 233–240. MR0857858 (88h:54056); 3. with J. Gallian and A. Higgins, Project NExT, *Notices Amer. Math. Soc.*, **47** (2000), No. 2, 217–220. 4. with J. W. Short, Weakened Lie groups and their locally isometric completions, *Topology Appl.*, **135** (2004), No. 1–3, 47–61. MR2024945 (2005b:22005); 5. Helping new faculty to develop into successful teachers and scholars, *CBMS Issues in Mathematics Education*, **14** (2007), 33–41.

Statement: For sixteen years, I led Project NEXT (New Experiences in Teaching), a professional development program of the MAA that helps new Ph.D.s in the mathematical sciences to make the transition from graduate student to faculty member. It addresses all aspects of an academic career: teaching, research, and service. Thus far, almost 1200 new faculty members have participated in this program, which the AMS has helped to support since 2001. My work with Project NExT has given me a unique perspective not only on the challenges faced by new members of our profession, but also on the opportunities that they will

have to advance mathematics and shape its future. One of my goals as a member of the Council would be to help the AMS serve the needs of new mathematicians and tap their creativity and enthusiasm in addressing some of the issues confronting our profession, such as attracting a diverse group of talented people into mathematics, improving mathematical education at all levels, fostering public appreciation of mathematics, and securing support for mathematics education and research. My activities in other professional organizations and my work at the NSF have taught me the importance of collaborating with other groups in these efforts.

Editorial Boards Committee

Krishnaswami Alladi



Professor, University of Florida, Gainesville, Florida.

Born: October 5, 1955, Trivandrum, India.

Ph.D.: University of California, Los Angeles, 1978.

AMS Committees: Program Committee, Southeastern Section, 2002–2003 (Chair, 2003); Committee on Committees, 2009–2011. Selected Addresses: One-hour Address, Conference on Special

Functions, *q*-series and Related Topics, Fields Institute, Toronto, 1995; Weissmann Public Lecture, City University of New York, 2002; Srinivasa Ramanujan Commemoration Lecture, International Conference on Fourier Analysis and Number Theory, SASTRA University, Kumbakonam, India, 2004; Public Lecture, Royal Spanish Academy of Sciences, Madrid, Spain, 2006; One-hour Address, Combinatory Analysis 2008, Conference in honor of George Andrews, Pennsylvania State University, 2008.

Additional Information: Chair, SASTRA Ramanujan Prize Committee, 2005-; Editorial Boards: Editor-in-Chief, *The Ramanujan Journal* (Springer), 1997-; Editor, *Developments in Mathematics* (Springer Book Series), 1998-; Associate Editor, *Notices Amer. Math. Soc.*, 2009–2012.

Selected Publications: 1. Some new observations on the Göllnitz-Gordon and Rogers-Ramanujan identities, *Trans. Amer. Math. Soc.*, **347** (1995), No. 3, 897–914. MR1284910 (95h:11109); 2. with G. E. Andrews and B. Gordon, Generalizations and refinements of a partition theorem of Göllnitz, *J. Reine Angew. Math.*, **460** (1995), 165–188. MR1316576 (96c:11119); 3. with G. E. Andrews and B. Gordon, Refinements and generalizations of Capparelli's conjecture on partitions, *J. Algebra*, **174** (1995), 636–658. MR1334229 (96b:11136); 4. Partition identities involving gaps and weights, *Trans. Amer. Math. Soc.*, **349** (1997), 2721–2735. MR1401759 (98c:05102); 5. with G. E. Andrews and A. Berkovich, A new four parameter *q*-series identity and its partition implications, *Invent. Math.*, **153** (2003), 231–260. MR1992013 (2004g:05018).

Statement: Any leading professional society should play a major role in the dissemination of knowledge in its discipline and one of the principal ways to do this is through

scholarly publications. The AMS has a fine collection of journals and book series with a broad range and scope. Many leaders of our discipline are involved in the editing of these publications to ensure that the highest quality is maintained, that new and important ideas are chronicled properly and communicated effectively through the Society's publications. This is especially important now because of the increasing awareness the world over of the central role of mathematics in a variety of fields. I will work enthusiastically to continue to engage the leaders of our discipline in the editorial process of our publications and help the AMS maintain its role as one of the world's major publishers.

Edward B. Saff



Professor and Director, Center for Constructive Approximation, Department of Mathematics, Vanderbilt University.

Born: January 2, 1944, New York City, NY, USA.

Ph.D.: University of Maryland, 1968.

Selected Addresses: Invited Address, AMS Southeast Region Conference, 2001; Plenary Speaker, Conference on Orthogonal Poly-

nomials, Carlos III University, Madrid, Spain, 2008; Colloquium Lectures, Steklov Institute, Moscow, 2007, University of New South Wales, Sydney, Australia, 2009; Main Presenter, Winter School on Applied Mathematics, City University, Hong Kong, 2009.

Additional Information: Fulbright Fellow (U.K.), Guggenheim Fellow, Erskine Fellow, University of Canterbury, New Zealand; ISI Highly Cited Researcher; Distinguished Professor (USF); Co-editor-in-chief, *Constructive Approximation Journal and Computational Methods and Function Theory*, Editor, *J. Approximation Theory*, Foundations of Computational Math. (1999–2004) and Cambridge University Press, Textbooks in Applied Mathematics (1995–2004).

Selected Publications: 1. with D. S. Lubinsky and H. N. Mhaskar, Freud's conjecture for exponential weights, *Bull. Amer. Math. Soc. (N.S.)*, **15** (1986), No. 2, 217–221. MR0854558 (88d:42039); 2. with V. Totik, Logarithmic potentials with external fields, *Grundlehren Math. Wiss.*, **316**, Springer-Verlag, 1997. MR1485778 (99h:31001); 3. with A. B. J. Kuijlaars, Asymptotics for minimal discrete energy on the sphere, *Trans. Amer. Math. Soc.*, **350** (1998), No. 2, 523–538. MR1458327 (98e:11092); 4. with D. P. Hardin, Discretizing manifolds via minimum energy points, *Notices Amer. Math. Soc.*, **51** (2004), No. 10, 1186–1194. MR2104914 (2006a:41049); 5. with B. Gustafsson, M. Putinar, and N. Stylianopoulos, Bergman polynomials on an archipelago: Estimates, zeros and shape reconstruction, *Adv. Math.*, **222** (2009), No. 4, 1405–1460. MR2554940.

Statement: The selection of editorial board members for the publications of the AMS is a great responsibility that entails a commitment (which I would be honored to make) to seek the most qualified individuals who represent the broad spectrum of mathematical pursuits. Indeed, the

editorial board is the journal since it speaks for both the quality and content of its publications. Maintaining a high intellectual standard, ensuring diversity, and guaranteeing the timely processing of manuscripts will be my guiding concerns in making board recommendations.

John R. Stembridge



Professor of Mathematics, University of Michigan.

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

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

AMS Offices: AMS-IMS-SIAM Committee on Joint Summer Research Conferences in the Mathematical Sciences, 1993–1996; David P. Robbins Prize Committee, 2009–2012. Selected Addresses: Commutative

Algebra and Combinatorics, Nagoya, 1990; Interactions of Combinatorics and Representation Theory, RIMS, Kyoto, 1998; Computational Lie Theory, CRM, Montreal, 2002; Combinatorics & Optimization 40th Anniversary, Waterloo, 2007; Topics in Combinatorial Representation Theory, MSRI, 2008.

Additional Information: Sloan Fellow, 1990–1992; Presidential Young Investigator, 1990–1995; Editorial Board Member, *Proc. Amer. Math. Soc.*, 1998–2005; Guggenheim Fellow, 2001; Editorial Board Member, *Trans. Amer. Math. Soc.*, 2006–.

Selected Publications: 1. Shifted tableaux and the projective representations of symmetric groups, *Adv. Math.*, **74** (1989), No. 1, 87–134. MR**0991411** (**90k:20026**); 2. Canonical bases and self-evacuating tableaux, *Duke Math. J.*, **82** (1996), No. 3, 585–606. MR**1387685** (**97f:05193**); 3. Combinatorial models for Weyl characters, *Adv. Math.*, **168** (2002), No. 1, 96–131. MR**1907320** (**2003j:17007**); 4. A local characterization of simply-laced crystals, *Trans. Amer. Math. Soc.*, **355** (2003), No. 12, 4807–4823. MR**1997585** (**2005h:17024**); 5. Coxeter cones and their *h* vectors, *Adv. Math.*, **217** (2008), 1935–1961. MR**2388082** (**2010e:52027**).

Statement: Communicating our ideas is the most important thing that we as mathematicians do. If elected, I will strive to find the best people to keep our Society's journals functioning well and meeting the needs of the mathematical community. In nominating members to serve on editorial boards, I think the most important qualities to look for are a strong sense of responsibility to the profession, good judgment and ethics, a wide range of contacts, and diversity of experience.

Sergei K. Suslov

Professor, School of Mathematical and Statistical Sciences & Mathematical, Computational and Modeling Sciences Center, Arizona State University.

Ph.D.: Kurchatov Institute of Atomic Energy, Moscow, Russia, 1986.

Selected Addresses: Third International Symposium on Orthogonal Polynomials and their Applications, Erice, Italy,



1990; Workshop in Special Functions, *q*-Series and Related Topics at The Fields Institute, University of Toronto, 1995; Conference on Symbolic Computation, Number Theory, Special Functions, Physics, and Combinatorics, University of Florida, Gainesville, 1999; Sixth International Symposium on Orthogonal Polynomials, Special Functions, and Applications, Rome, Italy, 2001; International

Conference on Difference Equations, Special Functions and Applications, Munich, Germany, 2005.

Additional Information: First Kurchatov Award to the Young Scientist, Kurchatov Institute, Moscow, Russia, 1985; Foreign Researcher Award, Natural Sciences and Engineering Research Council of Canada, 1994–1995; Member, Mathematical Sciences Research Institute, Berkeley, California, 1996–1997; NATO country director of the Advanced Study Institute "Special Functions 2000: Current Perspective and Future Directions", Tempe, Arizona, May–June 2000; Charles Wexler's Teaching Award for Distinguished Teaching of Mathematics, Department of Mathematics and Statistics, Arizona State University, Tempe, 2002; Editorial Board, Journal of Difference Equations and Applications.

Selected Publications: 1. with A. F. Nikiforov and V. B. Uvarov, Classical Orthogonal Polynomials of a Discrete Variable, Springer Series in Computational Physics, Springer-Verlag, 1991. MR1149380 (92m:33019); 2. with R. Askey and M. Rahman, On a general *q*-Fourier transformation with nonsymmetric kernels, J. Comput. Appl. Math., **68** (1996), No. 1-2, 25-55. MR**1418749** (**98m:42033**); 3. An Introduction to Basic Fourier Series, Developments in Mathematics, 9, Kluwer Academic Publishers, Dordrecht, 2003. MR1978912 (2004h:33002); 4. with R. Cordero-Soto, R. M. Lopez, and E. Suazo, Propagator of a charged particle with a spin in uniform magnetic and perpendicular electric fields, Lett. Math. Phys., 84 (2008), No. 2-3, 159-178. MR2415547 (2009m:81055); 5. Mathematical structure of relativistic Coulomb integrals, Phys. Rev. A., 81 (2010). **Statement:** In a competitive world of traditional and electronic journals I will do my best to identify the best editorial board members who are energetic and open to new challenges and will maintain the integrity and high quality of the AMS journals. My personal research interests are in both mathematics and physics and I am dedicated to the support of women and minorities.

Nominating Committee

Richard A. Brualdi

Bascom Professor of Mathematics, emeritus, University of Wisconsin, Madison, WI.

Born: September 2, 1939.

Ph.D.: Syracuse University, 1964.

AMS Committees: Editorial Boards Committee, 2003-

2007; Committee on Publications, 2010-2013.



Selected Addresses: AMS-MAA Plenary Lecture, Joint Mathematics Meetings, San Antonio, 1993; SIAM Conference on Applied Linear Algebra, Snowbird, Utah, 1997; British Combinatorics Conference, 2007; Spectral Graph Theory Conference, Rio de Janeiro, Brazil, 2008; IPM 20th Anniversary Combinatorics Conference, Tehran, Iran, 2009.

Additional Information: Board of Governors, Institute of Mathematics and its Applications, Minnesota, 1988–1991; Editor-in-chief, *Linear Algebra and its Applications* and *Electronic Journal of Combinatorics*; Chair, Department of Mathematics, University of Wisconsin, 1993–1999; President, International Linear Algebra Society, 1996–2002; Board of Trustees, Mathematical Sciences Research Institute, Berkeley, 1999–2002; Euler Medal, Institute of Combinatorics and its Applications, 2000; Hans Schneider Prize, International Linear Algebra

Society, 2006.

Selected Publications: 1. with B. L. Shader, Matrices of Sign-solvable Linear Systems, Cambridge Tracts in Mathematics, 116, Cambridge University Press, Cambridge, 1995. MR1358133 (97k:15001); 2. with J. Shen, Landau's inequalities for tournament scores and a short proof of a theorem on transitive sub-tournaments, *J. Graph Theory*, **38** (2001), No. 4, 244-254. MR**1864924** (2002g:05056); 3. with S. Kirkland, Aztec diamonds and digraphs, and Hankel determinants of Schröder numbers, J. Combin. Theory Ser. B, 94 (2005), No. 2, 334-351. MR2145518 (2006f:05010); 4. Combinatorial Matrix Classes, Encyclopedia of Mathematics and its Applications, 108, Cambridge University Press, Cambridge, 2006. MR2266203 (2007k:05038); 5. with D. Cvetkovićs, A Combinatorial Approach to Matrix Theory and Its Applications, CRC Press, Boca Raton, FL, 2009. MR2453822 (2009k:05002).

Statement: The main task of the Nominating Committee is to identify candidates for offices of the AMS. If elected, I would use my many years of experience in the mathematics community to recruit people of diverse interests who have the skill, foresight, and energy to serve in various capacities.

Beverly Diamond



Senior Vice Provost and Professor of Mathematics, College of Charleston.

Born: July 5, 1956, Charlottetown, Prince Edward Island, Canada.

Ph.D.: University of Manitoba, 1982.

AMS Offices: Member at Large of the Council, 2004–2008.

AMS Committees: Chair, Commit-

tee on Publications, 2005-2009; Committee on Education, 2009-2013.

Additional Information: American Association of University Women Fellowship, 1988–1989; Program Officer, National Science Foundation, 1996–1998; Associate Provost for Faculty Affairs, 2007–2009; Interim Provost, July 2009–January 2010.

Selected Publications: 1. with M. Barge, Stable and unstable manifold structures in the Hénon family, *Ergodic Theory Dynam. Systems*, **19** (1999), No. 2, 309–338. MR1685396 (2000i:37057); 2. with M. Barge, A complete invariant for the topology of one-dimensional substitution tiling spaces, *Ergodic Theory Dynam. Systems*, **21** (2001), No. 5, 1333–1358. MR1855835 (2002k:37026); 3. with M. Barge, Coincidence for substitutions of Pisot type, *Bull. Soc. Math. France*, **130** (2002), No. 4, 619–626. MR1947456 (2004c:37018); 4. with M. Barge, Proximality in Pisot tiling spaces, *Fund. Math.*, **194** (2007), No. 3, 191–238. MR2302003 (2008g:37016); 5. with M. Barge, Cohomology in one-dimensional substitution tiling spaces, *Proc. Amer. Math. Soc.*, **136** (2008), No. 6, 2183–2191. MR2383524 (2009c:37005).

Statement: I will work hard to ensure a diverse, skilled and committed group of mathematicians to provide leadership to and conduct the business of the AMS.

Judy Anita Kennedy



Professor, Lamar University. **Born:** July 24, 1947, Mobile, AL, USA.

Ph.D.: Auburn University, 1975. **AMS Offices:** Member at Large of the Council, 2006–2008.

AMS Committees: Committee on Meetings and Conferences, 2006–2008; Task Force on the First-Year Mathematics Experience, 2007–2008.

Selected Addresses: Hour Address, Dynamics Days Conference, Tempe, AZ, 1997; Anatolian Lectures in Dynamical Systems (4 lectures), Middle East Technical University, Ankara, Turkey, 1997; Hour Address, International Conference on Geometric Topology, Dubrovnik, Croatia, 1998; Plenary Talk, 2000 Annual Spring Topology/Dynamics Systems Conference, University of Texas at Austin, Austin, TX, 2000; Invited Address, 17th Summer Topology Conference, University of Auckland, Auckland, New Zealand, 2002.

Selected Publications: 1. Stable extensions of homeomorphisms on the pseudo-arc, *Trans. Amer. Math. Soc.*, 310 (1988), No. 1, 167–178. MR0939804 (89d:54023); 2. with J. A. Yorke, Basins of Wada, *Phys. D*, 51 (1991), No. 1–3, 213–225. MR1128813 (92k:58177); 3. with J. A. Yorke, Bizarre topology is natural in dynamical systems, *Bull. Amer. Math. Soc. (N.S.)*, 32 (1995), No. 3, 309–316. MR1307903 (95j:58107); 4. with E. Akin and M. Hurley, Dynamics of topologically generic homeomorphisms, *Mem. Amer. Math. Soc.*, 164 (2003), No. 783, viii+130 pp. MR1980335 (2004j:37024); 5. with D. Stockman and J. A. Yorke, The inverse limits approach to chaos, *J. Math. Econom.*, 44 (2008), No. 5–6, 423–444. MR2404675 (2009i:37038).

Statement: As a regular contributor to conferences at the regional, national and international level, I have an extensive base of colleagues and potential nominees ranging across a broad spectrum of institutions. This base also represents a broad array of mathematical areas ranging from applications to economics and physics, to dynamical systems, to topology. By utilizing this base and doing additional research, I will seek out underrepresented areas, institutions, and groups as a source of nominees to better fulfill the missions of the AMS.

Joshua D. Laison



Assistant Professor, Willamette University, Salem, Oregon.

Born: September 28, 1975, Philadelphia, PA, USA.

Ph.D.: Dartmouth College, 2001. **Selected Addresses:** DIMACS Connect Institute, Piscataway, NJ, 2001; International Symposium on Graph Drawing, Limerick, Ireland, 2005; Special Session, SIAM Discrete Math Conference, Victoria, Canada, 2006; SIAM Special Ses-

sion, Joint Mathematics Meetings, San Antonio, TX, 2006; Graph Portland Area Lecture Series, Portland, OR, 2008. Additional Information: Project NExT Fellow, 2002; Editorial Board, Young Mathematicians' Network; Co-director, Rocky Mountain MAA Section meeting, 2004.

Selected Publications: 1. with A. Dean, W. Evans, E. Gethner, M. A. Safari, and W. T. Trotter, Bar *k*-visibility graphs, *J. Graph Algorithms Appl.*, **11** (2007), No. 1, 45–59. MR**2318424** (**2008g:05139**); 2. with M. Schick, Seeing dots: visibility of lattice points, *Math. Mag.*, **80** (2007), No. 4, 274–282. MR**2356579** (**2008j:11079**); 3. with C. R. Gibbons, Fixing numbers of graphs and groups, *Electron. J. Combin.*, **16** (2009), No. 1. MR**2491641** (**2010e:05137**); 4. Just visiting, *Notices Amer. Math. Soc.*, **56** (2009), No. 11, 1451–1454. 5. with H. Alpert and C. Koch, Obstacle numbers of graphs, *Discrete Comput. Geom.*, **44** (2010), No. 1, 223–244.

Statement: The American Mathematical Society has been vital in building a strong mathematical community in the U.S. I would be delighted to work to make this community even better.

Donal O'Shea

Elizabeth T. Kennan Professor of Mathematics, Dean of Faculty, and Vice-President for Academic Affairs, Mount Holyoke College.

Born: August 28, 1952, Saint John, N.B., Canada.

Ph.D.: Oueen's University (Kingston, Canada), 1980.

AMS Committees: Committee to Select the Winner of the Prize for Exemplary Program or Achievement by a Mathematics Department, 2004–2007.

Selected Addresses: Peano Prize Address, Turin, Italy, 2008; Beyond Einstein, Mainz, Germany, 2008; Sulski Lecture, Holy Cross, Worcester, 2008; Shape of Content, Fields Institute, Toronto, 2009; Singularities in Aarhus, Aarhus, Denmark, 2009.



Additional Information: Director, NSF/Five Colleges Regional Geometry Institute, 1990–1993; Board of Directors, Canadian Mathematical Society, 1995–1999; Chief Academic Officers Task Force, Council of Independent Colleges, 2005–2008 (Chair, 2007–2008); Peano Prize, 2008; Visiting positions: IHES, 1983–1984, U. Massachusetts, Amherst, 1984–1985, U. Kaiserslautern, 1987–1988, U.

of Hawaii, Manoa, 1991-1992, 1997-1998, U. Miami, 2004, U. Edinburgh, 2005; Member: MAA, SMF, LMS, EMS, CMS. Selected Publications: 1. with J. Callahan, D. Cox, K. Hoffman, H. Pollatsek, and L. Senechal, Calculus in Context, New York: W. H. Freeman, 1995; 2. with L. Wilson, Limits of tangent spaces to real surfaces, Amer. J. Math., 126 (2004), No. 5, 951-980. MR2089078 (2005f:14110); 3. with D. Cox and J. Little, Using Algebraic Geometry, Springer, 1998, 2nd Edition, 2005, Japanese translation, 2000. MR2122859 (2005i:13037); 4. with D. Cox and J. Little, Ideals, Varieties and Algorithms: An Introduction to Computational Algebraic Geometry and Commutative Algebra, New York: Springer, 1992. Second Edition, 1996, Russian Translation, Mir Moscow, 1998, Japanese Translation, Springer-Verlag Tokyo, 2000. Third Edition, 2007. MR2290010 (2007h:13036); 5. The Poincaré Conjecture: *In Search of the Shape of the Universe*, New York: Walker & Company and UK: Penguin, 2007 (translated into German (S. Fischer), Italian (Rizzoli), French (Dunod), Greek (Travlos), Japanese (Nikkei), Hebrew (Aryeh Nir), Portuguese (Editoria Record), Korean (Kachi), Spanish (Tusquets), Czech (Acdemia), Chinese (Hunan Science)); all in 2007 except Hunan (2010). MR2354336 (2008i:00001).

Statement: The disciplines that comprise mathematics, and the professions that rest on them, are among the most critical and least understood in today's society. As the oldest and most representative mathematical society in the United States, the American Mathematical Society plays a vital role in the development of mathematical scientists, in the dissemination of mathematics, and in support of the mathematical professions. This is a cause in which I believe deeply, and I will work hard to recruit as broad, as diverse, as representative, and as talented a group of individuals as possible for leadership roles in the AMS.

Gunther Uhlmann

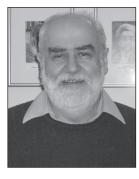
Walker Family Endowed Professor of Mathematics, University of Washington.

Born: February 9, 1952, Quillota, Chile.

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

AMS Offices: Member at Large of the Council, 1992–1994. AMS Committees: Committee to select winner of Birkhoff Prize, Chair, 2005; Committee to select speakers of AMS Western meetings, 2006–2007 (Chair, 2007); Program Committee, 8th Joint AMS-SMM meeting, 2009–2010.

Selected Addresses: Principal Speaker, CBMS, University of Kentucky, 1995; Invited Speaker, International Congress of Mathematicians, Berlin, 1998; One hour lecture,



Joint Mathematics Meetings, 2005; Plenary Lecture, International Congress of Industrial and Applied Mathematics, Zurich, 2007; Zygmund-Calderón Lectures, University of Chicago, Chicago, IL, 2008; E. Grosswald Lectures, Temple University, Philadelphia, PA, 2009. Additional Information: A. P. Sloan Foundation Fellowship, 1984–1986; J. S. Guggenheim Fellowship, 2001–2002; Correspond-

ing Member, Chilean Academy of Sciences, 2001; Member, American Academy of Arts and Sciences, 2009; SIAM Fellow, 2010; Chancellor Professor, MSRI, 2010; Senior Clay Scholar, 2010.

Selected Publications: 1. with J. Sylvester, A global uniqueness theorem for an inverse boundary value problem, *Ann. of Math. (2)*, 125 (1987), No. 1, 153–169. MR0873380 (88b:35205); 2. with L. Pestov, Two dimensional compact simple Riemannian manifolds are boundary distance rigid, *Ann. of Math. (2)*, 161 (2005), No. 2, 1093–1110. MR2153407 (2006c:53038); 3. with P. Stefanov, Boundary rigidity and stability for generic simple metrics, *J. Amer. Math. Soc.*, 18 (2005), No. 4, 975–1003. MR2163868 (2006h:53031); 4. with C. Kenig and J. Sjöstrand, The Calderón problem for partial data, *Ann. of Math. (2)*, 22 (2007), No. 2, 567–591. MR2299741 (2008k:35498); 5. with O. Imanuvilov and M. Yamamoto, Global uniqueness from partial Cauchy data in two dimensions, *J. Amer. Math. Soc.*, 23 (2010), 655–691.

