Biographies of Candidates 2018

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 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. Acronyms: AAAS (American Association for the Advancement of Science); AMS (American Mathematical Society); ASA (American Statistical Association); AWM (Association for Women in Mathematics); CBMS (Conference Board of the Mathematical Sciences); CCR (Center for Communications Research); ECCO (Encuentro Colombiano de Combinatoria); IAS (Institute for Advanced Study), IBM (International Business Machines); ICERM (The Institute for Computational and Experimental Research in Mathematics; ICM (International Congress of Mathematicians); IMA (Institute for Mathematics and Its Applications); IMS (Institute of Mathematical Statistics); IMU (International Mathematical Union); IPAM (Institute for Pure and Applied Mathematics); JAMS (Journal of the AMS); LMS (London Mathematical Society); MAA (Mathematical Association of America); MCTP (Mentoring Through Critical Transition Points in the Mathematical Sciences); MSRI (Mathematical Sciences Research Institute); NAS (National Academy of Sciences); NRC (National Research Council); NSF (National Science Foundation); NZMS (New Zealand Mathematical Society); PIMS (Pacific Institute for the Mathematical Sciences); SIAM (Society for Industrial and Applied Mathematics); STEM (Science, Technology, Engineering and Mathematics).


courtesy of Sara Billey

Vice President

Sara Billey

Professor of Mathematics, University of Washington.

PhD: University of California, San Diego, 1994.

AMS Offices: Member at Large, AMS Council, 2005–2008.

AMS Committees: David P. Robbins Prize Selection Committee, 2015–2018; Western Section Program Committee, 2014–2016.

Selected Addresses: Plenary Speaker, Canadian Discrete and Algorithmic Mathematics Conference, Victoria, 2011; Plenary speaker, Nebraska Conference for Undergraduate Women, 2012; Four part invited lecture series, Mathematical Society of Japan Seasonal Institute, Osaka, 2012; AMS-MAA Invited Lecture, MathFest, Portland, 2014; Invited lecturer series, Encuentro Colombiano de Combinatoria (ECCO), Bogotá, 2014.

Additional Information: National Physical Science Consortium Fellowship supported by IBM and UCSD, 1990–1994; NSF Postdoctoral Fellowship, 1994–1998; UC Presidential Postdoctoral Fellowship, 1995–1997; NSF CAREER Award, 2000–2006; Presidential Early Career Award (awarded by Bill Clinton), 2000; Top Cited Author Award for Advances in Applied Math, 2005–2010, shared with A. Postnikov; Focus Board Member, Center for Communications Research (CCR), 2011–2014; Inaugural Fellow, American Mathematical Society, 2012; Editor for *Advances in Math*, 2004–2016, *Journal of Combinatorics*, 2010–present, and *Algebraic Combinatorics*, 2018; Program committee for the 2016 SIAM Meeting on Discrete Mathematics; Member, Policy, and Advocacy Committee for the Association of Women in Mathematics (AWM), 2016–2018; Faculty mentor, UW Student Chapter of the AWM, 2016–present; Member, scientific committee for ECCO, 2018; Program co-chair, FPSAC, Ljubljana, Slovenia, 2019; Member, AWM, MAA, SIAM, lifetime member of the AMS.

Selected Publications: 1. with M. Haiman, Schubert polynomials for the classical groups. *J. Amer. Math. Soc.*, **8** (1995), no. 2, 443–482. MR1290232 **(98e:05109)**; 2. Kostant polynomials and the cohomology ring for *G/B*, *Duke Math. J.*, **96** (1999), no. 1, 205–224. MR1663931 (2000a:14060); 3. with V. Lakshmibai, Singular loci of Schubert varieties, *Progress in Mathematics*, **182**, Birkhäuser Boston, Inc., Boston, MA (2000). MR1782635 **(2001j:14065)**; 4. with F. Ardila, Flag arrangements and triangulations of products of simplices, *Adv. Math.*, **214** (2007), no. 2, 495–524. MR2349710 **(2008k:32080)**; 5. with M. Konvalinka and F. Matsen, On the enumeration of tanglegrams and tangled chains, *J. Combin. Theory Ser. A*, **146** (2017), 239–263. MR3574231.

Statement by Candidate: I am honored to run for Vice President of the American Mathematical Society. The AMS plays a key role in national and international advocacy for mathematicians in terms of funding, career opportunities, publishing, MathJobs.Org, research, and education. My professional goals align well with the mission of the AMS. I am devoted to mathematics research, teaching, and

outreach. I am dedicated to mentoring a diverse group of mathematicians at all stages of their careers in partnership with AWM and ECCO. I have enjoyed collaborating with mathematicians in industry and government at IBM and CCR, and strive to open up opportunities for students to go into a wide variety of careers. If elected, I will work to achieve the mission of the AMS including promoting mathematics research, communication, and understanding. I will emphasize the importance of connecting professional mathematicians inside and outside of academia. I envision more common tools for the profession such as creating a common app for graduate school and increasing diversity in mathematical sciences by expanding opportunities through the AMS. I am committed to the success and advancement of the AMS as a professional society and look forward to having this opportunity to serve the members of the organization.


Photo courtesy of Abigail Thompson

Vice President

Abigail Thompson

Professor and Chair of Mathematics, University of California, Davis.

PhD: Rutgers, 1986.

AMS Committees: Centennial Prize Committee, 2002–2004 (Chair, 2003–2004); Editorial Boards Committee, 2005–2008 (Chair, 2007–2008); Committee on the Profession, 2011–2014 (Chair, 2012–2014); Fellows Program Selection Committee, 2015–2018 (Chair, 2016–2017).

Selected Addresses: University of Texas, Austin, Distinguished Women in Mathematics Lecture, 2009; Humboldt State University, Kieval Lecture, 2013; Trinity College, Dublin, William Rowan Hamilton Geometry and Topology Conference, 2015; Institute for Advanced Study, Members' Seminar, 2015; University of Nebraska, Nebraska Conference for Undergraduate Women in Mathematics, 2016.

Additional Information: Lady Davis Fellow, Hebrew University, 1986–1987; UC President's Fellow, 1987–1988; NSF Postdoctoral Fellow, 1988–1991; Member, Institute for Advanced Study, Princeton, 1990–1991, 2000–2001, 2015–2016; Alfred P. Sloan Foundation Research Fellow, 1991–1993; NSF Career Advancement Award, 1994–1995; Director, COSMOS (California State Summer School in Math and Science) program, UC Davis, 2001–2017; American Mathematical Society Ruth Lyttle Satter Prize, 2003; Member, Executive Committee AWM, 2006–2009; UC Davis Distinguished Teaching Award for Graduate Teaching, 2010; Fellow, American Mathematical Society, 2013.

Selected Publications: 1. Thin position and the recognition problem for S_3", *Math. Res. Lett.*, **1** (1994), no. 5, 613–630. MR1295555 **(95k:57015)**; 2. Thin position and bridge position for knots in the 3-sphere, *Topology*, **36** (1997), no. 2, 505–507. MR1415602 **(97m:57013)**; 3. with J. Hass and W. Thurston, Stabilization of Heegaard splittings, *Geom. Topol.*, **13** (2009), no. 4, 2029–2050. MR2507114 **(2010k:57044)**; 4. with R. E. Gompf and M. Scharlemann, Fibered knots and potential counterexamples to the property *2R* and slice-ribbon conjectures, *Geom. Topol.*, **14** (2010), no. 4, 2305–2347. MR2740649 **(2012c:57012)**; 5. Does diversity trump ability? *Notices Amer. Math. Soc.*, **61** (2014), no. 9, 1024–1030. MR3241558.

Statement by Candidate: I'm honored to be nominated for this position. Mathematicians and the AMS have been remarkably successful at anticipating and meeting important needs of the mathematical community. MathJobs is a great example. It's crucial for the AMS to proactively identify similar new opportunities to continue to strengthen the community. As an example to consider: While many of our new PhDs want to stay in academia, the academic job market is uncertain at best, and industries should be lining up trying to lure away our new PhDs. With this in mind, we could consider initiating a math-PhD-to-industry pipeline by starting a version of MathJobs for industry internships. More philosophically, mathematics is the search for truth. We need to resist the miasma of relativism spreading through the academy, while striving to make mathematics welcoming to all. Supporting excellent mathematics should be kept in focus as the fundamental goal of the AMS.


Photo courtesy of Matthew Ando

Board of Trustees

Matthew Ando

Professor of Mathematics and Associate Dean for Life and Physical Sciences, University of Illinois at Urbana–Champaign.

PhD: MIT, 1992.

AMS Offices: Member of the Council, 2011–2014.

AMS Committees: Committee on Publications, 2011–2013 (Chair, 2013); Department Chairs Workshop Co-Leader, 2015–2017.

Selected Addresses: Newton Institute, 2002; Abel Symposium, Oslo, 2007; Colloquium, Yale University, 2008; Fields Institute, 2010; Colloquium, University of Göttingen, 2015.

Additional Information: Chair, Department of Mathematics, University of Illinois, 2011–2017; Member, TPSE Mathematics Advisory Group, 2016–present; Member, Steering Committee, BIG Math Network, 2016–2018; Member: AMS, AWM, MAA.

Selected Publications: 1. Power operations in elliptic cohomology and representations of loop groups, *Trans. Amer. Math. Soc.*, **352**, 12 (2000). MR1637129. **(2001b:55016)**; 2. with M. Hopkins and N. Strickland, Elliptic spectra, the Witten genus, and the Theorem of the Cube, *Invent. Math.*, **146** (2001). MR1869850 **(2002g:55009)**; 3. The sigma orientation for analytic equivariant elliptic cohomology, *Geom. Topol.*, **7** (2003). MR1988282 **(2004d:55006)**; 4. with A. Blumberg, D. Gepner, M. Hopkins, and C. Rezk, an ∞-categorical approach to *R*-line bundles, *R*-module Thom spectra, and twisted *R*-homology, *J. Topol.*, **7** (2014), 869–893. MR3252967; 5. with A. Blumberg and D. Gepner, Parametrized spectra, multiplicative Thom spectra, and the twisted Umkehr map, to appear, *Geom. Topol.*

FROM THE AMS SECRETARY

Statement by Candidate: It has been an honor to serve the American Mathematical Society in a number of ways, for example, as a member of the Council, as a leader of the Department Chairs Workshop, and on the Committee on Publications. The AMS played an important role in supporting my work as department chair, for example by hosting the graduate school fair and poster sessions at the JMM and by hosting the Find Graduate Programs in the Mathematical Sciences web page. For another example, the Committee on Education, the Committee on the Profession, and others repeatedly rose to the task of convening timely and important discussions on issues facing the mathematics profession. The most important challenges facing the profession are broadening participation in and access to the mathematical sciences and increasing public, private, and governmental understanding of and support for mathematical sciences. I am excited by the work that the AMS is doing in these areas, and I am eager to see more. The trustees oversee the business affairs and fiscal health of the AMS. My recent experience with financial stewardship includes chairing my department from 2011 to 2017 and chairing a task force at my university which initiated campus-wide budget reform. From these experiences I have learned that good financial stewardship includes investing in projects which are important to the future of the enterprise.

Photo courtesy of Rick Miranda

Board of Trustees

Rick Miranda

Provost and Executive Vice President, Colorado State University.

PhD: Massachusetts Institute of Technology, 1979.

AMS Committees: Committee on Meetings and Conferences, 1999–2002; Committee on International Meetings, 2000; Committee on the Profession, 2007–2010; Committee on Professional Ethics, 2016–present.

Selected Addresses: "Interpolation theorems via degeneration techniques," Algebraic Geometry Colloquium Lecture, Princeton University, November 2007; "Degenerations and applications to interpolation problems," Plenary talk, Conference on Algebraic Geometry, D-Modules, Foliations, and their interactions, Buenos Aires, Argentina, July 2008; "The Role of University Administrators", Workshop on Transforming Post-Secondary Education (TPSE-Math), Washington, September 2015; "Applications of toric methods to interpolation of fat points in P^2," University of Rome Geometry Colloquium, June 2017; "International Education and University Partnerships," Conference of University Presidents, Qingdao, China, October 2017.

Selected Publications: 1. with R. James, A Riemann–Roch theorem for edge-weighted graphs, *Proc. Amer. Math. Soc.*, **141** (2013), no. 11, 3793–3802. MR3091769; 2. with C. Ciliberto, Homogeneous interpolation on ten points, *J. Algebraic Geom.*, **20** (2011), no. 4, 685–726. MR2819673 **(2012h:14013)**; 3. with A. Calabri, C. Ciliberto, and F. Flamini, On the K^2 degenerations of surfaces and the multiple point formula, *Ann. of Math.*, **165** (2007), 335–395. MR2299737 **(2008c:14018)**; 4. Algebraic Curves and Riemann Surfaces, AMS Graduate Studies in Mathematics, **5** (1995), 395 pages. MR1326604 **(96f:14029)**; 5. with C. Ciliberto and A. Lopez, Projective degenerations of K3 surfaces, Gaussian maps, and Fano threefolds, *Invent. Math.*, **114** (1993), no. 3, 641–667. MR1244915 **(94k:14028)**.

Statement by Candidate: It is an honor to be nominated to assist the Society in this role of overseeing its business operations with an eye to long-term financial health and stability. As Provost/Executive Vice President (P/EVP) at Colorado State, I am responsible for academic affairs, university operations, and budgets for the university and work closely with our Board of Governors as the Chief Academic Officer of our System. I hope that my sixteen years of experience as Dean and P/EVP will be useful to the Society. I will work hard to help the Society's leadership in ensuring that we remain an indispensable asset to our members and to the profession.

Photo courtesy of Sonia Paban

Member at Large

Dan Freed

Kerr Centennial Professor of Mathematics, University of Texas at Austin.

PhD: University of California, Berkeley, 1985.

AMS Committees: AMS Task Force on Electronic Journals, 1995; AMS National Program Committee, 1998–2001; AMS Committee on Steele Prizes, 2004–2006; AMS Special Program Committee, 2012–2014; AMS Central Section Program Committee, 2014–2016; AMS Committee on Science Policy, 2015–2017; AMS Program Committee for National Meetings, 2018–2021.

Selected Addresses: AMS Eastern Sectional Meeting, Boston, 1995; International Congress of Mathematical Physics, London, 2000; International Congress of Mathematicians, Beijing, 2002; Arbeitstagung, Bonn, 2017; String-Math Conference, Sendai, 2018.

Additional Information: Sloan Fellow, 1988–1992; NSF Presidential Young Investigator Award, 1990–1996; Cofounder and Steering Committee, Park City/IAS Mathematics Institute, 1990–1999; Scientific Advisory Committee, Simons Center for Geometry and Physics, 2000–2010; Guggenheim Fellow, 2002–2003; Scientific Advisory Committee, MSRI, 2002–2006; Scientific Advisory Board, BIRS, 2005–2008; Board of Trustees, MSRI, 2006–2019; Fellow, AMS, 2012; Senior Berwick Prize, London Mathematical Society, 2014; IBM Einstein Fellow, IAS, 2015; General Member, Aspen Center for Physics, 2015–2020; Distinguished Visiting Research Chair, Perimeter Institute, 2016-2018; Poincaré Distinguished Visiting Professor, Stanford, 2017; Organizer of over 30 conferences and workshops.

Selected Publications: 1. with J.-M. Bismut, The analysis of elliptic families. II. Dirac operators, eta invariants, and the holonomy theorem, *Comm. Math. Phys.*, **107** (1986),

no. 1, 103–163. MR0861886 **(88h:58110b)**; 2. Higher algebraic structures and quantization, Comm. *Math. Phys.*, **159** (1994), no. 2, 343–398. MR1256993 **(95c:58034)**; 3. with M. J. Hopkins, Teleman, Constantin, Loop groups and twisted K-theory III., *Ann. of Math. (2)* **174** (2011), no. 2, 947–1007. MR2831111; 4. with R. Melrose, A mod k index theorem., *Invent. Math.*, **107** (1992), no. 2, 283–299. MR1144425 **(93c:58212)**; 5. with G. W. Moore, Twisted equivariant matter, *Ann. Henri Poincaré*, **14** (2013), no. 8, 1927–2023. MR3119923.

Statement by Candidate: It is an honor to be nominated for election as a Member at Large of the AMS Council. For 130 years the AMS has represented the interests of mathematics and mathematicians, and I look forward to continuing that advocacy. Mathematics research plays a critical role in society, now and in the future, and strengthening mathematics education at all levels is a profound challenge we must meet. In order to sustain and renew our community, we must nurture mathematical talent in those from a diversity of backgrounds and age ranges. We must also become more effective and visible in the public sphere. I look forward to collaborating with my colleagues on these and many more important issues.


Photo courtesy of Fernando Q. Gouvêa

Member at Large

Fernando Q. Gouvêa

Carter Professor of Mathematics, Colby College.

PhD: Harvard, 1987.

Selected Addresses: William M. Bullitt Lecture, University of Louisville, April 2000; Physics Department Colloquium, Brookhaven National Laboratory, May 2000; Frederick V. Pohle Colloquium on the History of Mathematics, Adelphi University, November 2004; Plenary Address, Joint Mathematics Meetings, Atlanta, January 2005; MAA Carriage House Lecture, June 2012.

Additional Information: Member, MAA, 1981–; Lester R. Ford Award, 1995; Editor, *MAA Focus*, 1999–2011; Editor, *MAA Reviews*, 2005–; Beckenbach Book Prize, 2006; Co-organizer, Contributed Paper Session on "Mathematical Texts: Famous, Infamous, and Influential," Joint Mathematics Meetings, 2010; Member of the program committee, X Seminário Nacional de História da Matemática and CLE4Science, Campinas, Brazil, March 2013; Editor, *Carus Mathematical Monographs*, 2013–2019.

Selected Publications: 1. with W.P. Berlinghoff, *Math through the ages: A gentle history for teachers and others*, Expanded second edition, MAA Textbooks. A joint publication of Oxton House Publishers, Farmington, ME; and Mathematical Association of America, Washington, DC, 2015. xiv+331 pp. MR3443340; 2. *A guide to groups, rings, and fields*, The Dolciani Mathematical Expositions, 48. MAA Guides, 8, Mathematical Association of America, Washington, DC, 2012. xviii+309 pp. MR3013267; 3. Was Cantor surprised? *Amer. Math. Monthly*, **118** (2011), no. 3, 198–209. MR2800330 **(2012f:01016)**; 4. Where the slopes are, *J. Ramanujan Math. Soc.*, **16** (2001), no. 1, 75–99. MR1824885 **(2002f:11062)**; 5. p-adic numbers. An introduction, Universitext, Springer-Verlag, Berlin, 1993. vi+282 pp. MR1251959 **(95b:11111)**.

Statement by Candidate: As a member of AMS for more than 30 years, I have benefitted from its work promoting mathematics, supporting the mathematics research community, and publishing books and journals. Becoming part of the AMS governance structure would allow me to help the Society continue its work in all of these areas.


Photo courtesy of Christopher D. Hacon

Member at Large

Christopher D. Hacon

McMinn Presidential Endowed Chair, Distinguished Professor, University of Utah.

PhD: University of California, Los Angeles, 1993.

AMS Committees: Fellows Program Selection Committee, 2013–2016; Cole Prize Selection Committee, 2015; Western Section Program Committee, 2015–2016 (Chair, 2016).

Selected Addresses: Plenary Speaker, AMS Fall Sectional Meeting, University of California, Riverside, 2009; Invited Lecture, Algebraic and Complex Geometry Session, ICM, 2010; Plenary Speaker, British Mathematical Colloquium, Edinburgh, 2010; Plenary Speaker, European Congress of Mathematics, Krakow, 2012; Plenary Speaker, JMM, Baltimore, 2014; Plenary Speaker, AMS Summer Institute, Salt Lake City, 2015.

Additional Information: MSRI Science Advisory Committee, 2012–2018 (co-chair. 2015–2018); ICM committee for the selection of sectional speakers in Algebraic and Complex Geometry, 2014; Selection Committee, Alfred P. Sloan Research Fellowships in Mathematics, 2015–2018; Editor, *Journal of Algebraic Geometry*, since 2009; Associate Editor, *Journal of the American Mathematical Society*, 2009–2017; Associate Editor, *Annals of Mathematics*, since 2013; Editor, *Bollettino dell'Unione Matematica Italiana*, since 2013; Associate Editor, *Cambridge Journal of Mathematics*, since 2016; Associate editor, *Journal of Pure and Applied Algebra*, since 2016; Clay Research Award, 2007; Frank Nelson Cole Prize in Algebra, 2009; Antonio Feltrinelli Prize in Mathematics, Mechanics, and Applications, 2011; Fellow of the AMS, 2013; University of Utah Distinguished Scholarly and Creative Research Award, 2015; E.H. Moore Research Article Prize, 2016; Member of the American Academy of Arts and Sciences, 2017; Breakthrough Prize, 2018.

Selected Publications: 1. with C. Birkar, P. Cascini, and J. McKernan, Existence of minimal models for varieties of general type, *J. Amer. Math. Soc.*, **23** (2010), no. 2, 405–468, MR2601039 **(2011f:14023)**; 2. with J. McKernan, Existence of minimal models for varieties of general type II: Pl-flips, *J. Amer. Math. Soc.*, **23** (2010), no. 2, 469–490. MR2601040 **(2011f:14024)**; 3. with J. McKernan and C. Xu, ACC for log canonical thresholds, *Ann. of Math. (2)* **180** (2014), 523–

571. MR3224718; 4. with C. Xu, On the three dimensional minimal model program in positive characteristic, *J. Amer. Math. Soc.*, **28** (2015), no. 3, 711–744. MR3327534; 5. with J. McKernan and C. Xu, On the birational automorphisms of varieties of general type, *Ann. of Math. (2)* **177** (2013), 1077–1111. MR3034294.

Statement by Candidate: It is a great honor to have been nominated to run for the position of Member at Large of the AMS Council. The AMS plays an important role in promoting, advancing, and disseminating mathematical research; strengthening and supporting mathematical education; and promoting awareness and appreciation of mathematics and its connections with other disciplines. The Society also aims to create a diverse and inclusive environment inside the mathematical profession by encouraging full participation by all individuals. If elected, I hope to play an active role in strengthening the mathematics community and in helping the AMS to achieve its goals.


Photo courtesy of Max S. Gerber

Member at Large

Daniel Krashen

Professor, Rugers University.

PhD: University of Texas at Austin, 2001.

Selected Addresses: Speaker, Thematic Program on Torsors, Nonassociative Algebras and Cohomological Invariants, Fields Institute, 2013; Invited address, AMS Sectional Meeting, Knoxville, 2014; Speaker, The Use of Linear Algebraic Groups in Geometry and Number Theory, Banff International Research Station, 2015; Course Lecturer, Local-Global Principles and Their Obstructions, University of Pennsylvania, 2015; Speaker, Algebraic Geometry Northeastern Series (AGNES), Yale University, 2016.

Additional Information: Faculty Early Career Development (CAREER) Program Award, 2012; Presidental Early Career Award for Scientists and Engineers (PECASE), 2016; Fellow, American Mathematical Society, 2017.

Selected Publications: 1. with D. Harbater and J. Hartmann, Applications of patching to quadratic forms and central simple algebras, *Invent. Math.*, **178** (2009), 231–263. MR2545681; 2. with E. Matzri, Diophantine and cohomological dimensions, *Proc. Amer. Math. Soc.*, **143** (2015), no. 7, 2779–2788. MR3336603; 3. Period and index, symbol lengths, and generic splittings in Galois cohomology, *Bull. Lond. Math. Soc.*, **48** (2016), no. 6, 985–1000. MR3608943; 4. with B. Antieau and M. Ward, Derived categories of torsors for Abelian schemes., *Adv. Math.*, **306** (2017), 1–23. MR3581296; 5. with D. Harbater and J. Hartmann, Local-global principles for torsors over arithmetic curves., *Amer. J. Math.*, **137** (2015), no. 6, 1559–1612. MR3432268.

Statement by Candidate: I am honored to have the opportunity to serve as a Member at Large for the AMS. I plan to do my best to support the community of research mathematicians, to broaden the scope of outreach, and to work towards better retention of talent in our discipline in the early career stages.


Photo courtesy of Susan Loepp

Member at Large

Susan Loepp

Chair and Professor of Mathematics, Williams College.

PhD: University of Texas at Austin, 1994.

AMS Committees: Committee on the Profession, 2008–2011 (Chair, 2011), Subcommittee on Programs that Make a Difference, 2008–2011 (Chair, 2010, 2011); Task Force on Employment Prospects, 2009; Working Group on the Nominee Program, 2010; Secretary Search Committee, 2010–2011; Committee on Committees, 2011–2013; Committee on Women in Mathematics, 2017–2020.

Selected Addresses: MAA Invited Address, MathFest, Hartford, 2013; Keynote Address, Women In Mathematics In New England (WIMIN) Conference, Smith College, 2013; Richard R. Bernard Lecture, Davidson College, 2015; Invited Speaker, Southwestern Undergraduate Mathematics Research Conference, Arizona State University, 2016; Martin Guterman Lecture, Tufts University, 2017.

Additional Information: Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics (MAA), 2012; AMS Fellow, Inaugural Class, 2012; Associate Editor, *The American Mathematical Monthly*, 2012–2022; Director, Williams College SMALL REU program, 2009, 2011, and 2013; member of MAA and AWM.

Selected Publications: 1. Excellent Rings with Local Generic Formal Fibers, *J. Algebra*, **201** (1998), 573–585. MR1612339 **(99a:13013)**; 2. with C. Rotthaus, Some Results on Tight Closure and Completion, *J. Algebra*, **246** (2001), 859–880. MR1872128 **(2002k:13010)**; 3. with P. Charters, Semilocal Generic Formal Fibers, *J. Algebra*, **278** (2004), 370–382. MR2068083 **(2005e:13008)**; 4. with W. Wootters, Protecting Information: From Classical Error Correction to Quantum Cryptography, *Cambridge University Press* (2006). MR2278947 **(2008e:94031)**; 5. with P. Jiang, A. Kirkpatrick, S. Mack-Crane, and S. Tripp, Controlling the Generic Formal Fibers of Local Domains and Their Polynomial Rings, *J. Commut. Algebra*, **7** (2015), no. 2, 241–264. MR3370486.

Statement by Candidate: I am honored to be nominated to run for Member at Large of the AMS Council. If elected, I will work to advance the mission of the AMS, which includes promoting mathematical research, supporting mathematical education at all levels, advancing the status of the profession, and encouraging and facilitating full participation of individuals from a variety of backgrounds. Concrete ways in which the AMS can promote its mission include: supporting opportunities for research collaborations; advocating for resources for faculty and students so that all students can thrive in their mathematical education; and increasing the visibility and support of mathema-

ticians (through, for example, prizes and fellowships) in a way that reflects the increasing diversity of our profession.

Through my experience as both a member and as chair of the AMS Committee on the Profession, I witnessed the positive influence the AMS has on the mathematical community, and, as a member of the AMS Council, I would advocate for changes that would benefit everyone in mathematics.


Photo courtesy of Lenhard Ng

Member at Large

Lenhard Ng
Eads Family Professor of Mathematics, Duke University.
PhD: MIT, 2001.
AMS Committees: Southeastern Section Program Committee, 2014–2016.
Selected Addresses: Salomon Bochner Lectures in Mathematics, Rice University, 2006; Plenary Speaker, Knots in Washington, George Washington University, 2008; Lecture series, O Gosto pela Matemática, Fundação Calouste Gulbenkian, Lisbon, 2010; Invited Address, AMS Sectional Meeting, Tulane University, 2012.
Additional Information: NSF CAREER grant, 2009; Editor, *Quantum Topology*, 2009–present; Subcommittee for the USA Mathematical Olympiad, MAA, 2009–2014; Simons Fellow in Mathematics, 2015; Organizer for the semester program Symplectic Geometry and Topology, Institut Mittag-Leffler, 2015; Bass Society of Fellows (Duke), 2016; Co-director, Duke Opportunities in Mathematics (collaborative undergraduate research), 2017–present; Collaborating editor, Problems section, *American Mathematical Monthly*, 2017–present.
Selected Publications: 1. Framed knot contact homology, *Duke Math. J.*, 141 (2008), no. 2, 365 –406. MR2376818 **(2008k:53202)**; 2. Rational symplectic field theory for Legendrian knots, *Invent. Math.*, **182** (2010), no. 3, 451–512. MR2737704; 3. with M. Aganagic, T. Ekholm, and C. Vafa, Topological strings, D-model, and knot contact homology, *Adv. Theor. Math. Phys.*, **18** (2014), no. 4, 827–956. MR3277674; 4. with T. Ekholm, Legendrian contact homology in the boundary of a subcritical Weinstein 4-manifold, *J. Differential Geom.*, **101** (2015), no. 1, 67–157. MR3356070; 5. with T. Ekholm and V. Shende, A complete knot invariant from contact homology, *Invent. Math.*, **211** (2018), no. 3, 1149–1200. MR3763406.
Statement by Candidate: It is an honor to be considered to serve as a Member at Large of the AMS Council. The AMS provides a crucial platform for promoting the subject of mathematics to the outside world and developing the community of research mathematicians in the United States and beyond. I am very interested in issues around growing the base of our community to ensure a vibrant future for our subject. These include strongly promoting diversity in hiring and recruiting at all academic levels, advocating for funding opportunities to be as widely available as possible, and bolstering opportunities for young people (undergraduates and even high school students) to participate in mathematical research. If elected, I would welcome the opportunity to work toward these goals and to help the AMS' broad efforts to support the mathematical community.


Photo courtesy of Feye Levine/University of Maryland

Member at Large

Kasso A. Okoudjou
Professor, University of Maryland.
PhD: Georgia Institute of Technology, 2003.
Selected Addresses: Invited speaker, 19th Conference for African American Researchers in the Mathematical Sciences, UCSD, July 2013; Invited speaker, 5th International Conference, Computational Harmonic Analysis, Vanderbilt University, May 2014; Lecturer, AMS Short Course on Finite Frame Theory: A Complete Introduction to Overcompleteness, JMM, San Antonio, January 2015; Lecturer, IMA PI Summer Graduate Program: Modern Harmonic Analysis and Applications, College Park, July 2015; Invited speaker, 6th Cornell Conference on Analysis, Probability, and Mathematical Physics on Fractals, Cornell University, Ithaca, June 2017.
Additional Information: Junior Faculty Teaching Award, Department of Mathematics, Cornell University, 2004; Dean's Award for Excellence in Teaching, University of Maryland, 2009; Humboldt Research Fellowship for Experienced Researchers, 2010–2012; Organizer, AMS Short Course on Finite Frame Theory: A Complete Introduction to Overcompleteness, JMM, San Antonio, January 2015.
Selected Publications: 1. Embeddings of some classical Banach spaces into modulation spaces, *Proc. Amer. Math. Soc.*, **132** (2004), no.6, 1639–1647. MR2051124 **(2005b:46074)**; 2. with R. S. Strichartz, Weak uncertainty principles on fractals, *J. Fourier Anal. Appl.*, **11** (2005), no. 3, 315–331. MR2167172 **(2006f:28011)**; 3. with A. Bényi, K. Gröchenig, and L. Rogers, Unimodular Fourier multipliers on modulation spaces, *J. Funct. Anal.*, **246** (2007), no. 2, 366–384. MR2321047 **(2008c:42005)**; 4. with I. A. Krishtal, Invertibility of the Gabor frame operator on the Wiener amalgam space, *J. Approximation Theory*, **153** (2008), no. 2, 212–224. MR2450070 **(2009g:42059)**; 5. with G. Kutyniok, F. Philipp, and K. E. Tuley, Scalable frames, Linear Algebra Appl., 438 (2013), 2225–2238. MR3005286.
Statement by Candidate: I am honored to be nominated for election as a Member at Large of the AMS Council. The role of the AMS to promote mathematical research and teaching in the USA and abroad is indisputable. At the same time the challenges facing our discipline, e.g., college affordability, the ever decreasing federal and state funding for higher education and research, the reliance of colleges and universities on non-tenured faculty to carry out their teaching mission, the necessity of making our discipline more diverse, and the responsibility to reach out to mathematicians and aspiring mathematicians in

developing countries, all require the AMS to be proactive. If elected, and based on my experience, I shall give my best effort to formulate solutions to these challenges.


Photo courtesy of Maria Cristina Pereyra

Member at Large

Maria Cristina Pereyra
Professor, University of New Mexico.
PhD: Yale University, 1993.
Selected Addresses: Invited Speaker, Fourier Talks (FFT), Norbert Wiener Center, University of Maryland, College Park, 2010; Invited Speaker, 9th International Conference, Harmonic Analysis and Partial Differential Equations, El Escorial, Spain, 2012; Invited Speaker, Conference on Geometry, Analysis and Probability, Korea Institute for Advanced Study (KIAS), Seoul, South Korea, 2017; Invited Speaker, Session on Harmonic Analysis and Approximation Theory, 31st Brazilian Colloquium of Mathematics, IMPA, Rio de Janeiro, Brazil, 2017; Plenary Speaker, Harmonic Analysis Conference Celebrating the Mathematical Legacy of Alan McIntosh, Australian National University, Canberra, Australia, 2018.
Additional Information: Visiting Fellow: Centre de Recerca Matemática, Barcelona, Spain, 2003; Instituto de Matemáticas de la Universidad de Sevilla, Spain, 2011; University of South Australia (UniSA), Adelaide, Australia, 2011 and 2018. Co-director: UNM-PNM Statewide High School Mathematics Contest, New Mexico, 1999–2005. Co-organizer: New Mexico Analysis Seminar Annual Conferences, Albuquerque/Las Cruces, 1998-2009 and 2014-2016; CBMS-NSF Conference, Las Cruces, 2005; Conference honoring Mischa Cotlar, Albuquerque, 2007; Conference honoring Cora Sadosky, Albuquerque, 2014. Organizing Committee, ICM 2018 Satellite Conference, Brazil. Principal/Co-principal Investigator(co-PI): NSF-MCTP University of New Mexico, 2008-2017. Member: Institute for Advanced Study (IAS), Princeton, NJ. Honors and Awards: University of New Mexico Outstanding Teacher of the Year, 2012–2013.
Selected Publications: 1. with A. Kairema, J. Li, and L. A. Ward, Haar bases on quasi-metric measure spaces, and dyadic structure theorems for function spaces on product spaces of homogeneous type, *J. Func. Anal.*, **271** (2016), no. 7, 1793–1843. MR3535320; 2. with D. Chung and C. Perez, Sharp bounds for general commutators on weighted Lebesgue spaces, *Trans. Amer. Math. Soc.*, **364** (2012), 1163–1177. MR2869172 **(2012j:42019)**; 3. with O. Dragicevic, L. Grafakos, and S. Petermichl, Extrapolation and sharp norm estimates for classical operators on weighted Lebesgue spaces, *Publ. Mat.*, **49** (2005), no. 1, 73–91. MR2140200 **(2006d:42019)**; 4. with S. Efromovich, J. D. Lakey, and N. Tymes, Data-driven and optimal denoising of a signal and recovery of its derivative using multiwavelets, *IEEE Trans. Signal Process.*, **52** (2004), no. 3, p. 1–8; 5. Lecture notes on dyadic harmonic analysis, Second Summer School in Analysis and Mathematical Physics (Cuernavaca, 2000), 1–60, *Contemp. Math.*, **289**, AMS, 2001.

Statement by Candidate: It is an honor to be nominated for Member at Large of the Council of the AMS. Throughout my career I have devoted a lot of my time to promoting mathematics in the Southwest and beyond. Organizing many conferences, as co-PI for training MCTP-NSF grants, and organizing high school math competitions, all in New Mexico. Mentoring undergraduate/graduate students who have gone on to successful careers in teaching, in industry, and in academia in the US, Brazil, and Korea. Teaching many undergraduate to research level mini-courses in Argentina, Mexico, Spain, and the US (IAS, IMA). I have served my department as graduate chair for several years, as well as in many other departmental and university-wide committees. I have served in NSF research panels, I have coauthored two books and coedited two volumes honoring the late Cora Sadosky. I have been mindful of creating opportunities for junior and women/minority mathematicians. I have yet to serve in an official position in our professional mathematical societies; I do feel the time is ripe for me to step in, learn, and contribute to the overall AMS mission of promoting mathematics to the public at large and to furthering the interests of mathematical research, scholarship, and education.


Photo courtesy of the Department of Mathematics at the University of Illinois at Urbana-Champaign

Member at Large

Hal Schenck
Professor and Chair, Iowa State Mathematics.
PhD: Cornell University, 1997.
AMS Committees: Data Committee, 2006–2008; Math Research Community Advisory Board, 2008–2014; Employment Committee, 2016–present.
Selected Addresses: Invited hour address, AMS sectional meeting, New Orleans 2012; Invited lectures, NSF–DFG conference "Syzygies in Berlin," 2013; Invited lectures, SIAM workshop on applied toric geometry, 2013; Keynote address, 35th annual Pi Mu Epsilon conference, 2014; Invited lectures, KIAS conference, "Syzygies, exterior algebra, and cohomology," 2016.
Additional Information: College of Arts & Sciences Clark Award for distinguished teaching, Cornell, 1997; NSF Postdoc, 1998–2001; Organizer, Oberwolfach workshops 2007 (with Alicia Dickenstein, David Cox, Josef Schicho), 2015 (with Larry L. Schumaker, Tanya Sorokina), 2016, 2019 (with Diane Maclagan, Jürgen Hausen); Organizer, graduate student workshop on toric varieties (with David Cox): MSRI 2009, Cortona 2011, Taipei 2019; SIAM workshop on toric varieties (with John Little), 2013; College of Arts & Sciences award for excellence in undergraduate teaching, Illinois, 2015. Managing Editor: *Journal of Commutative Algebra*, 2008–2017; *Advances in Applied Mathematics*, 2018–present. Editorial boards: *International Journal of Algebra and Computation*, 2011–2017; Advances in Applied Math, 2014–2017; *Journal of Combinatorial Algebra, 2017–present. Officer, United States Army, 1986–1990.*

Selected Publications: 1. with D. Cox and J. Little, Toric varieties, *AMS Graduate Studies in Mathematics*, **124** (2011), 858 pp. MR2810322 **(2012g:14094)**; 2. Equivariant Chow cohomology of nonsimplicial toric varieties, *Trans. Amer. Math. Soc.*, **364** (2012), no. 8, 4041–4051. MR2912444; 3. with M. Stillman, High rank linear syzygies on low rank quadrics, *Amer. J. Math.*, **134** (2012), no. 2, 561–579. MR2905005; 4. with C. Irving, Geometry of Wachspress surfaces, *Algebra Number Theory*, **8** (2014), no.2, 369–396. MR3212860; 5. with D. Cohen, Chen ranks and resonance, *Adv. Math.*, **285** (2015), 1–27. MR3406494.

Statement by Candidate: I am honored to have been nominated for the position of Member at Large of the AMS Council. This is a crucial time for higher education, and I believe the AMS should take the lead in publicizing the value of mathematics and mathematical research. Our voice needs to be heard not only by elected officials and funding agencies, but within academia, as universities respond to financial pressure by replacing tenured faculty with non-tenured faculty. The explosion of jobs that require quantitative literacy means this is also a time of opportunity, and the AMS should foster connections and build bridges to industry and non-academic careers. Finally, it is essential that we work to ensure that our discipline is open and welcoming to all: my own mentoring work has focused on student veterans.


Photo courtesy of Joseph Rabinoff

Member at Large

Melanie Matchett Wood

Vilas Distinguished Achievement Professor, University of Wisconsin–Madison.

PhD: Princeton, 2009.

AMS Committees: AMS-MAA-SIAM Frank and Brennie Morgan Prize Committee, 2016–2019.

Selected Addresses: AMS Western Sectional Meeting Invited Address, 2010; Joint Mathematics Meetings MAA Invited Address, 2011; J. Sutherland Frame Lecture, MAA MathFest, 2012; John G. Kemeny Lectures, Dartmouth, 2016; Beatrice Yormark Distinguished Lecture, Stanford, 2016.

Additional Information: American Institute of Mathematics Five-Year Fellow, 2009; AMS Fellow, 2012; Assistant Director, Wisconsin Mathematics, Engineering, and Science Talent Search, 2012–present; Sloan Research Fellowship, 2015; Packard Fellowship for Science and Engineering, 2015; Editorial Board, *Journal de Théorie des Nombres de Bordeaux*, 2015–present; Regeneron Science Talent Search (formerly Westinghouse, Intel) Judging Panel, 2015–present; NSF CAREER Grant, 2017; AWM-Microsoft Research Prize in Algebra and Number Theory, 2018.

Selected Publications: 1. Parametrization of ideal classes in rings associated to binary forms, *J. Reine Angew. Math.*, **689** (2014), 169–199. MR3187931; 2. with R. Vakil, Discriminants in the Grothendieck ring, *Duke Math. J.*, **164** (2015), no. 6, 1139–1185. MR3336842; 3. with D. Erman, Daniel, Semiample Bertini theorems over finite fields, *Duke Math. J.*, **164** (2015), no. 1, 1–38. MR3299101; 4. with N. Boston, Nigel, Non-abelian Cohen-Lenstra heuristics over function fields, *Compos. Math.*, **153** (2017), no. 7, 1372–1390. MR3705261; 5. The distribution of sandpile groups of random graphs, *J. Amer. Math. Soc.*, **30** (2017), no. 4, 915–958. MR3671933.

Statement by Candidate: I am honored to be nominated to run for Member at Large of the Council of the AMS. The AMS plays a central role in promoting mathematics research and supporting the profession of mathematics. These are both crucial jobs in our world, where declining funding for science makes it even more important to communicate the importance of mathematics beyond our profession. On the one hand, the place of science and technology in the modern world and the key role mathematics plays across the sciences make it appear an easy message to communicate. On the other hand, any mathematician who has struck up a conversation with their neighbor on an airplane knows that there remains a lot of work to be done in properly communicating what we do and why it is important. The AMS is also in a great position to help make our profession more welcoming and encouraging to people of all genders, races, and backgrounds. A bright future requires the mathematical talent that all people have the ability to develop. I would like to see the AMS collect, evaluate, and disseminate best practices for making common processes of our profession, such as hiring and organizing conferences, as inclusive as possible.


Photo courtesy of Sami H. Assaf

Nominating Committee

Sami H. Assaf

Assistant Professor of Mathematics, University of Southern California.

PhD: University of California, Berkeley, 2007.

AMS Committees: AMS Representative for AWM/AMS Noether Lecture Committee, 2013–2016.

Selected Addresses: Invited Speaker, MIT Women in Mathematics: A Celebration, Cambridge MA, 2008; Invited Speaker, Mathematical Society of Japan Seasonal Institute International Conference, Schubert Calculus, Osaka, Japan, 2012; Keynote Speaker, Women in Mathematics in Southern California, Los Angeles, CA, 2017; Plenary Speaker, Formal Power Series and Algebraic Combinatorics, Hanover, NH, 2018.

Additional Information: USC Endowed Chair, Gabilan Assistant Professor of Mathematics, 2012–2017; USC Mentoring Award for Faculty Mentoring Undergraduates, 2017; Founder and Director, Venice Math Circle (weekly outreach program to empower preschool and kindergarten children to explore mathematics), 2017–2018.

Selected Publications: 1. Nonsymmetric Macdonald polynomials and a refinement of Kostka–Foulkes polynomials, *Trans. Amer. Math. Soc.*, to appear; 2. with D. Searles, Schubert polynomials, slide polynomials, Stanley symmetric functions and quasi-Yamanouchi pipe dreams, *Adv.*

Math., **306** (2017), 89–122. MR3581299; 3. Dual equivalence graphs I: A new paradigm for Schur positivity, *Forum Math. Sigma*, **3** (2015), e12, 33 pp. MR3376739; 4. with P. Diaconis, K. Soundararajan, A rule of thumb for riffle shuffling, *Ann. Appl. Probab.*, **21** (2011), no. 3, 843–875. MR2830606 **(2012f:60012)**; 5. with P. R. W. McNamara, A Pieri rule for skew shapes, *J. Combin. Theory Ser. A*, **118** (2011), no. 1, 277–290. MR2737201 **(2011k:05262)**.

Statement by Candidate: I am honored to be considered for election to the Nominating Committee of the AMS. If elected, I will take to heart the important task of vetting potential leaders for this important organization, and I will engage in recruiting outstanding candidates to serve–candidates who share the values of the AMS and the larger mathematical community and who will work to advance the interests of mathematical research and education.

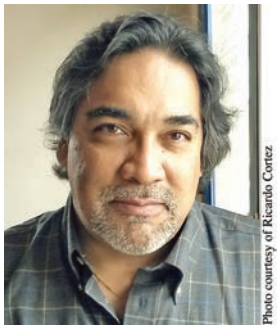
Photo courtesy of Ricardo Cortez

Nominating Committee

Ricardo Cortez

Pendergraft William Larkin Duren Professor, Mathematics Department, Tulane University.

PhD: University of California, Berkeley, 1995.

AMS Committees: Consultant, AMS Notices Editorial Board; AMS-Simons Travel Grants Committee; ICM Travel Grants Selection Committee.

Selected Addresses: Invited Address, AMS Southeastern Sectional, NC State, Fall 2016; Plenary, SIAM Southeastern Atlantic Sectional, Chapel Hill, NC, spring 2018; Invited Address, SIAM Conference on Applied Mathematics Education (ED18), July 2018.

Additional Information: NSF Postdoctoral Fellow, Courant Institute, 1995–1998; Director, Center for Computational Science, Tulane University, 2006 –2018; Blackwell–Tapia Prize, 2012; SIAM Fellow, 2017.

Selected Publications: 1. The Method of Regularized Stokeslets, *SIAM J. Sci. Comput.*, **23** (2001), no. 4, 1204–1225. MR1885598 **(2002k:76102)**; 2. With D. Brown, and M. Minion, Accurate Projection Methods for the Incompressible Navier–Stokes Equations., *J. Comput. Phys.*, **168** (2001), 464–499. MR1826523 **(2002a:76112)**; 3. with H.-N. Nguyen, Reduction of the Regularization Error of the Method of Regularized Stokeslets for a Rigid Object Immersed in a Three-Dimensional Stokes Flow, *Commun. Comput. Phys.*, **15** (2014), no. 1, 126–152. MR3094201; 4. with C. Anhalt, Mathematical Modeling: A Structured Process, *Mathematics Teacher*, **108** (2015), 6, February, 446–452, National Council of Teachers of Mathematics; 5. with J. Wrobel, S. Lynch, A. Barrett and L. Fauci, Enhanced flagellar swimming through a compliant viscoelastic network in Stokes flow, *J. Fluid Mech.*, **792** (2016) 775–797. MR3482199.

Statement by Candidate: It is an honor to be considered for the AMS Nominating Committee, whose charge to identify nominees for leadership positions at the Society is extremely important. The Society benefits from the ideas and contributions of people with a variety of viewpoints and a diversity of backgrounds. Over the years I have become involved in work that promotes mathematics and mathematics education research, and work that advances underrepresented minorities in mathematics. If elected, I will reach out to these professional networks in order to help generate a strong pool of diverse candidates who can lead the AMS and facilitate the participation of all its members.


Photo courtesy of Lisa Waters

Nominating Committee

Rebecca Garcia

Professor, Sam Houston State University.

PhD: New Mexico State University, 2004

AMS Committees: AMS Policy Committee on Meetings and Conferences 2017–2019 (Chair, 2018–2019).

Selected Addresses: Invited Speaker, AMS Western Regional Conference, 2012; Plenary Talk, CombinaTexas, 2014; Invited Speaker, SACNAS Scientific Symposium, 2017; Keynote Speaker, ASPiRE Conference, 2017.

Additional Information: Member of the MAA, AWM, and SACNAS; Co-Founder and Co-Director, Pacific Undergraduate Research Experience in Mathematics (PURE Math), 2011–2015; Distinguished College or University Teaching of Mathematics Award, Texas MAA Section, 2015; Co-Director, MSRI-UP, 2017–present.

Selected Publications: 1. with S. Meyer, S. and A. Seitz, Construction and enumeration of Franklin circles, *Involve*, **2** (2009), no. 3, 357–370. MR2551132 **(2011b:05014)**; 2. with M. Lane and B. Loft, Algebraic combinatorics of diametric magic circles, *Math. Comput. Simulation*, **82** (2011), no. 1, 44–53. MR2846414 **(2012j:05033)**; 3. with S. Chapman, R. García, L. Puente, M. Malandro, and K. Smith, Algebraic and combinatorial aspects of sandpile monoids on directed graphs, *J. Combin. Theory Ser. A*, **120** (2013), no. 1, 245–265. MR2971710; 4. with D. Silva, Order dimension of layered generalized crowns, *Ars Combin.*, **113A** (2014), 171–186. MR3202722; 5. with C. Wyels, REU design: broadening participation and promoting success, *Involve* **7** (2014), no. 3, 315–326. MR3423936.

Statement by Candidate: Over the last twenty years, I have participated in and led efforts promoting diversity and inclusiveness in the mathematical sciences: directing undergraduate research programs, organizing sessions at national conferences, and planning and organizing workshops and conferences. Given the honor and opportunity to serve in the Nominating Committee, I will leverage my experience and expertise to assist the AMS in its mission and efforts to broaden participation in the mathematical sciences.


Photo courtesy of Yongbin Ruan

Nominating Committee

Yongbin Ruan

Bill Fulton Collegiate Chair Professor of Mathematics, University of Michigan.

PhD: UC–Berkeley, 1991.

Selected Addresses: International Congress Invited Lecture, Berlin, 1998; Plenary Lecture, AMS Regional Meeting, 2001; Invited Lecture on Latin American Congress of Mathematicians, June 2004; six lectures at Imperial College, 2010; Invited Lecture on Pacific Rim International Congress of Mathematician, June 2013.

Additional Information: Sloan Research Fellowship 1995–1997; Vilas associated award 1998–2000; Distinguished Overseas Young Scientist Awards, National Natural Science Foundation of China, 2000–2003; The Ministry of Education of China, Changjiang (Jiangzhuo) Professor, 2000–2005; Clay Senior Scholar, 2006; AMS Fellow, 2015.

Selected Publications: 1. with G. Tian, A Mathematical Theory of Quantum Cohomology, *J. Differential Geom.*, **42**, no. 2 (1995), 259–367. MR1366548 **(96m:58033)**; 2. Topological sigma model and Donaldson type invariants in Gromov theory, *Duke Math. J.*, **83** (1996), no. 2, 461–500. MR1390655 **(97d:58042)**; 3. with W. Chen, A new cohomology theory of orbifolds, *Comm. Math. Phys.*, **248** (2004), no. 1, 1–31. MR2104605 **(2005j:57036)**; 4. with H. Fan and T. Jarvis, The Witten equation, mirror symmetry and quantum singularity theory, *Ann. of Math. (2)* **178** (2013), no. 1, 1–106. MR3043578; 5. with S-Q Liu and Y. Zhang, BCFG Drinfeld-Sokolov Hierarchies and FJRW-Theory, *Invent. Math.*, **201** (2015), no. 2, 711–772. MR3370624.

Statement by Candidate: With the new administration, mathematics research environments are experiencing a period of uncertainty. Now more than ever, it is important to have strong people leading the AMS. I am both humbled and honored to be a candidate for Nominating Committee.


Photo courtesy of JHU Mathematics Department

Nominating Committee

David Savitt

Professor of Mathematics and Department Chair, Johns Hopkins University.

PhD: Harvard, 2001.

AMS Committees: Committee on the Profession, 2014–2017 (Chair, 2016–2017).

Selected Addresses: AMS Special Session, JMM 2008; Galois Trimester, IHP, Paris, 2010; Lecture series at POSTECH, South Korea, 2011; Workshop on geometric methods in the *P*-adic Langlands correspondence, Pisa, 2016; Workshop on *P*-adic Hodge theory and automorphic forms, Beijing, 2017.

Additional Information: Instructor at Canada/USA Mathcamp, a high school summer program, most years 1996–2014; Board of directors, Canada/USA Mathcamp, 2002–present; Lead organizer of the Arizona Winter School, 2007–2013; Presidential Early Career Award for Scientists and Engineers, 2012; AMS Fellow, 2017.

Selected Publications: 1. On a conjecture of Conrad, Diamond, and Taylor, *Duke Math. J.*, **128** (2005), no. 1, 141–197. MR2137952 **(2006c:11060)**; 2. with T. Gee and T. Liu, The Buzzard-Diamond–Jarvis conjecture for unitary groups, *J. Amer. Math. Soc.*, **27** (2014), no. 2, 389–435. MR3164985; 3. with M. Emerton and T. Gee, Lattices in the cohomology of Shimura curves, *Invent. Math.*, **200** (2015), no. 1, 1–96. MR3323575; 4. with T. Gee and T. Liu, The weight part of Serre's conjecture for GL(2), *Forum Math. Pi 3* (2015), e2, 52 pp. MR3324938; 5. with T. Gee and F. Herzig, General Serre weight conjectures, to appear, *J. Eur. Math. Soc.*

Statement by Candidate: I am honored to have been asked to stand for election to the Nominating Committee; it would be a privilege to serve the AMS and the mathematical community in this capacity. If elected I will do all I can, especially by consulting others with a wide range of lived experiences and from a broad spectrum of institutions, to identify a diverse and capable group of candidates for AMS leadership positions.


Photo courtesy of Deane Yang

Nominating Committee

Deane Yang

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

PhD: Harvard University, 1983.

Selected Addresses: Invited Lecture, First Annual Geometry Festival, University of Pennsylvania; Invited Hour Address, Sectional Meeting of the AMS, South Bend, Indiana, 1991; Invited Lecture, Northwest Geometry Festival, University of Oregon, Eugene, Oregon, 1991; Invited Lecture, Northwest Geometry Festival, University of Washington, Seattle, Washington, 2001; Invited lecture, Caltech/UCLA Joint Analysis Seminar, 2013.

Additional Information: NSF Postdoctoral Fellowship, 1983–1985; Alfred P. Sloan Foundation Fellowship, 1988–1990; Co-Founder (with S. S. Chern and K. Uhlenback), Texas Geometry and Topology Festival; Vice Provost, Polytechnic University, 1996–1997; AMS Fellow, 2012–present; Editorial Board, *Geometriae Dedicata*, 2013–; Editorial Board, *Proceedings of the AMS*, 2018–present.

Selected Publications: 1. with Y. Huang, E. Lutwak and G. Zhang, Geometric measures in the dual Brunn-Minkowski theory and their associated Minkowski problems, *Acta Math.*, **216** (2016), no. 2, 325–388. MR3573332; 2. with K. J. Böröczky, E. Lutwak and G. Zhang, The logarithmic Minkowski problem, *J. Amer. Math. Soc.*, **26** (2013), no. 3, 831–852. MR3037788; 3. with E. Lutwak and G. Zhang, Optimal Sobolev norms and the Lp-Minkowski problem, *Int. Math. Res. Not.*, **2006**, Art. ID 62987, 21 pp., MR2211138 **(2007d:52007)**; 4. with E. Lutwak and G. Zhang, Cramér-

Rao and moment-entropy inequalities for Renyi entropy and generalized Fisher information, *IEEE Trans. Inform. Theory*, **51** (2005), no. 2, 473–478. MR2236062 **(2008a:94056)**; 5. with E. Lutwak and G. Zhang, The Cramer-Rao inequality for star bodies, *Duke Math. J.*, **112** (2002), no. 1, 59–81, MR1890647 **(2003f:52006)**.

Statement by Candidate: I am honored to be nominated to serve on the Nominating Committee. My career as a mathematician has given me a broad perspective on who we should seek out as candidates for the AMS Council and Committees. Although I have always been an active research mathematician, I have experience in other roles. I have worked in the financial sector, as a consultant. During most of my career, I taught at Polytechnic University, at a time when most students came from economically and educationally disadvantaged backgrounds. Often they were the first person in their family to attend college. Both as a professor and as an administrator working closely with my colleagues, I devoted a lot of time and effort to strengthening students' skills and understanding in math through effectively diagnosing their needs. In 2014, Polytechnic became the NYU School of Engineering, and I am now in the Courant math department, which is much more research-focused. I believe that the AMS should continue its efforts to support and promote mathematics and mathematicians in research, education, and industry, from a variety of backgrounds. I am committed to be a part of this effort.


Photo courtesy of Ian Agol

Editorial Boards Committee

Ian Agol

Professor, University of California, Berkeley.

PhD: University of California, San Diego, 1998.

AMS Committees: E. H. Moore Research Article Prize committee, 2016.

Selected Addresses: Plenary speaker, Graduate Student Topology and Geometry Conference, Chicago, 2018; AMS Joint Meetings Plenary speaker, San Antonio, 2015; Plenary speaker, ICM Seoul, 2014; Invited speaker, ICM Madrid, 2006; Invited speaker, Midwest sectional AMS meeting, Evanston, 2004.

Additional Information: Oswald Veblen Prize in Geometry (joint with Dani Wise), 2013; Associate Editor, *Journal of the American Mathematical Society (JAMS).*

Selected Publications: 1. with F. C. Marques and A. Neves, Min-max theory and the energy of links, *J. Amer. Math. Soc.*, **29** (2016), no. 2, 561–578. MR3454383; 2. with Y. Liu, Presentation length and Simon's conjecture, J. *Amer. Math. Soc.*, **25** (2012), no. 1, 151–187. MR2833481; 3. The minimal volume orientable hyperbolic 2-cusped 3-manifolds., *Proc. Amer. Math. Soc.*, **138** (2010), no. 10, 3723–3732. MR2661571 **(2011k:57023)**; 4. with P. Storm and W. P. Thurston, and an appendix by Nathan Dunfield, Lower bounds on volumes of hyperbolic Haken 3-manifolds, *J. Amer. Math. Soc.*, **20** (2007), no. 4, 1053–1077. MR2328715 **(2008i:53086)**; 5. with J. Hass and W. Thurston, The computational complexity of knot genus and spanning area, *Trans. Amer. Math. Soc.*, **358** (2006), no. 9, 3821–3850. MR2219001 **(2007k:68037)**.

Statement by Candidate: I prefer to publish in accessible journals, and I admire the AMS model of low-cost, widely accessible, green open access journals. I have published several papers in the AMS journals and served on the 2016 E. H. Moore Prize committee. Moreover, I am currently serving as an associate editor for *JAMS*. So I have some familiarity with AMS publications.


Photo courtesy of David Marker

Editorial Boards Committee

David Marker

LAS Distinguished Professor, Department of Mathematics, Statistics, and Computer Science, University of Illinois at Chicago.

PhD: Yale, 1983.

AMS Committees: Publications Committee, 2012–2015; Arnold Ross Lecturer Committee, 2016–2019.

Selected Addresses: AMS Regional Meeting, Stillwater Oklahoma, 1994; Annual Meeting Japanese Math. Society, Nagoya, 1998; Canadian Math Society, Summer Meeting Calgary, 2006.

Additional Information: National Science Foundation Postdoctoral Research Fellow, 1983; AMS Centennial Fellow, 1994; Editor *Journal of Symbolic Logic*, 1994–2000; Editorial Board *Notre Dame Journal of Formal Logic*, 1996–present; MSRI Semester Program Organizer, 1998, 2014; Judge, INTEL Science Talent Search, 2001–2015; Managing Editor *Lecture Notes in Logic*, 2005–2006; Association for Symbolic Logic Publisher, 2006–2008; Association for Symbolic Logic Shoenfield Prize, 2007; AMS Fellow, 2012.

Selected Publications: 1. with L. Harrington and S. Shelah, Borel orderings, *Trans. Amer. Math. Soc.*, **310** (1988), no. 1, 293–302. MR0965754 **(90c:03041)**; 2. with L. P. D. van den Dries and A. Macintyre, The elementary theory of restricted analytic fields with exponentiation, *Ann. of Math. (2)* **140** (1994), no. 1, 183–205. MR1289495 **(95k:12015)**; 3. with L. P. D. van den Dries and A. Macintyre, Logarithmic-exponential power series, *J. London Math. Soc. (2)* **56** (1997), no. 3, 417–434. MR1610431 **(99d:03063)**; 4. Model theory, An introduction, Graduate Texts in Mathematics, **217**, Springer–Verlag, New York (2002). MR1924282 **(2003e:03060)**; 5. A remark on Zilber's pseudoexponentiation, *J. Symbolic Logic*, **71** (2006), no. 3, 791–798. MR2250821 **(2007d:03061)**.

Statement by Candidate: It is an honor to be nominated for the AMS Editorial Boards Committee. Maintaining high quality journals is one of the most important roles of our Society. We should be looking for editors with broad mathematical interests who are fair-minded and efficient. I believe my experience as an editor, managing

editor, and publisher will be beneficial in the search for the right individuals.


Photo courtesy of James McKernan

Editorial Boards Committee

James McKernan
Professor, University of California, San Diego.
PhD: Harvard, 1991.
Selected Addresses: Mori Dreams Spaces, Takagi Lectures, University of Tokyo, 2009; Finite Generation of the canonical ring, Plenary Address, KMS–AMS joint meeting, 2009; Flips and flops, Sectional talk in algebraic geometry, ICM Hyderabad, 2010; Moduli of Varieties, AMS Summer Research Institute on Algebraic Geometry, Salt Lake City, Utah, 2015; Symmetries of Algebraic Varieties, AMS Sectional Meeting Invited Address, Salt Lake City, 2016.
Additional Information: Clay Research Award, 2007; Cole Prize in Algebra, 2009; Fellow, Royal Society, 2011; E. H. Moore Research Article Prize, 2016; Breakthrough Prize in Mathematics, 2018.
Selected Publications: 1. with C. Birkar, P. Cascini and C. Hacon, Existence of minimal models for varieties of log general type, *J. Amer. Math. Soc.*, **23** (2010), no. 2, 405–468. **MR2601039 (2011f:14023)**; 2. with C. Hacon, Boundedness of pluricanonical maps of varieties of general type, *Invent. Math.*, **166** (2006), no. 1, 1–25. MR2242631 **(2007e:14022)**; 3. with S. Keel, Rational curves on quasi-projective surfaces, *Mem. Amer. Math. Soc.*, **140** (1999), no. 669, viii+153. MR1610249 **(99m:14068)**; 4. with C. Hacon and C. Xu, ACC for log canonical thresholds, *Ann. of Math. (2)*, **180** (2014), no. 2, 523–571. MR3224718; 5. with C. Hacon and C. Xu, On the birational automorphisms of varieties of general type, *Ann. of Math. (2)* **177** (2013), no. 3, 1077–1111. MR3034294.
Statement by Candidate: Journals play a very important role at the AMS and in the mathematics community as a whole. If elected, I will work to nominate editors that reflect the diverse interests of this community.


Photo courtesy of Kyle Alexander

Editorial Boards Committee

Terence Tao
Professor, University of California, Los Angeles.
PhD: Princeton, 1996.
AMS Committees: JAMS Editorial Board, 2005–2011; Steele Prize Committee, 2009–2010; AMS-MAA Joint Lecture Committee, 2014; von Neumann Symposium Committee, 2014; Committee on National Awards and Public Representation, 2018–2020.
Selected Addresses: CBMS Lectures, Las Cruces, 2005; Current Events Lecture, San Diego, 2008; Einstein Lecture, Los Angeles, 2010; AMS-NZMS Maclaurin Lectures, New Zealand, 2013.
Additional Information: Bôcher Prize, 2002; Levi L. Conant Award, 2004; Fields Medal, 2006; Fellow of the AMS, 2012.
Selected Publications: 1. with A. Knutson, The honeycomb model of GL_n(C) tensor products I. Proof of the saturation conjecture, *J. Amer. Math. Soc.*, **12** (1999), no. 4, 1055–1090. MR1671451 **(2000c:20066)**; 2. with J. Colliander, M. Keel, G. Staffilani, H. Takaoka, Sharp global well-posedness for KdV and modified KdV on R and T, *J. Amer. Math. Soc.*, **16** (2003), no. 3, 705–749. MR1969209 **(2004c:35352)**; 3. with B. Green, The primes contain arbitrarily long arithmetic progressions, *Ann. of Math. (2)* **167** (2008), no. 2, 481–547. MR2415379 **(2009e:11181)**; 4. with K. Ford, B. Green, S. Konyagin, J. Maynard, Long gaps between primes. *J. Amer. Math. Soc.*, **31** (2018), no. 1, 65–105. MR3718451; 5. Finite time blowup for an averaged three-dimensional Navier–Stokes equation, J. *Amer. Math. Soc.*, **29** (2016), no. 3, 601–674. MR3486169.
Statement by Candidate: I am honored to be nominated for the Editorial Boards Committee. After serving for seven years as an editor of *JAMS* (after three years as an associate editor), I appreciate the complex role that editors play in working with authors, referees, and each other to ensure that a journal publishes high quality research of interest to a wide spectrum of mathematical fields. For the chief AMS journals it is particularly important to me that the editorial boards represent a broad range of mathematical communities, and I look forward to working with these boards to help ensure this.