Curriculum Vitae of Ken Dykema

August 21, 2022

Biographical Information

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Education

- Ph.D. University of California, Berkeley, 1993 (Dan-Virgil Voiculescu, advisor).
- B.A. in Mathematics, Oxford University, 1987, (first class honors).
- B.S. in Mathematics & Chemistry, University of Wisconsin Eau Claire, 1985, (summa cum laude, named the outstanding senior in Arts and Sciences).

Position

Professor of Mathematics, Texas A&M University (beginning September 2003)

Previous Positions and Fellowships

- Associate Professor of Mathematics, Texas A&M University (September 2001 August 2003).
- Assistant Professor of Mathematics, Texas A&M University (August 1999 August 2001).
- Lektor, Odense University, Odense, Denmark (January 1999 June 1999).
- Adjunkt, Odense University (January 1996 December 1999).
- Fields Institute Research Fellow, Waterloo, Ontario (August 1994 June 1995).
- NSF Postdoctoral Fellow at UC-Berkeley and the Fields Institute (August 1993 December 1995).
- Teaching Assistant, UC-Berkeley, (September 1992 December 1992).
- Hertz Foundation Fellow, UC-Berkeley, (September 1987 May 1993, except fall 1992).
- Marshall Scholarship, St. John's College, Oxford, (October 1985 June 1987).
- Lando-SOHIO summer research student in theoretical chemistry with D.G. Truhlar, University of Minnesota, Minneapolis, (Summer 1984).
- Computational chemistry research student with M.S. Gordon, North Dakota State University, Fargo, (Summer 1983).
- National Merit Scholar (one of my undergraduate years, though I forget which one).
- Theoretical chemistry research student with F.W. King, University of Wisconsin Eau Claire, (Summer 1982 and part time during September 1982 September 1985).

Awards and Honors

- Fellow of the American Mathematical Society, class of 2020.
- Simons-CRM Professor, Centre de Recherches Mathematiques, Montreal, March 2019
- Simons Visiting Professorship, Oberwolfach and University of Saarbrücken, March 2017
- NSF Postdoctoral Fellowship, 1993-1995
- NSF graduate fellowship (declined)
- Hertz Foundation Fellowship, 1987-1993
- Marshal Scholarship, 1985-1987.

Visiting Positions

- Development leave from Texas A&M University taken at various places, principally the Erwin Schrödinger Institute in Vienna, Austria, (January 2011 May 2011).
- Visit to University of Göttingen, Germany, partially funded by the Alexander-von-Humboldt Foundation, (30 days in June/July 2009).
- Development leave from Texas A&M University taken at the University of Münster, Germany, partially funded by the Alexander-von-Humboldt Foundation, (September 2004 July 2005).

- Researcher at MSRI, (January May 2001)
- SDU-Odense University, (June 2000)
- Institut de Mathematiques de Luminy, France, October-December 1998.

Languages: English (native); German (very good), Danish (fair), French (fair).

Scholarly Publications

Papers on Mathematics (peer reviewed)

- **102.** "Some non-spectral DT-operators in finite von Neumann algebras," *J. Operator Theory* (to appear), (with Amudhan Krishnaswamy-Usha).
- 101. "Angles between Haagerup-Schultz projections and spectrality of operators," J. Funct. Anal. 281 (2021), paper no. 109027, 26pp. (with Amudhan Krishnaswamy-Usha).
- 100. "Joint spectral distributions and invariant subspaces for commuting operators in a finite von Neumann algebra," *Canad. J. Math.* 72 (2020), 1188-1245, (with Ian Charlesworth, Fedor Sukochev and Dmitriy Zanin).
- **99.** "Non-closure of the set of quantum correlations via graphs," *Comm. Math. Phys.* **365** (2019), 1125-1142, (with Vern Paulsen and Jitendra Prakash).
- **98.** "The delta game," *Quantum Inf. Comput.* **18** (2018), 599-616, (with Vern Paulsen and Jitendra Prakash).
- 97. "Decomposability and norm convergence properties in finite von Neumann algebras," *Integral Equations Operator Theory* 90:54 (2018), 32 pages, (with Joseph Noles and Dmitriy Zanin).
- **96.** "Nilpotent elements of operator ideals as single commutators," *Proc. Amer. Math. Soc.* **146** (2018), 3031-3037 (with Amudhan Krishnaswamy-Usha)
- **95.** "Numerical Ranges in II₁ Factors," *Proc. Edinburgh Math. Soc.* **61** (2018), 31-55 (with Paul Skoufranis)
- **94.** "On algebra-valued R-diagonal elements," *Houston J. Math.* **44** (2018), 209-252 (with March Boedihardjo)
- 93. "An upper triangular decomposition theorem for some unbounded operators affiliated to II₁-factors," *Israel J. Math.* 222 (2017), 645-709 (with Fedor Sukochev and Dmitriy Zanin)
- **92.** "Asymptotic *-moments of some random Vandermonde matrices," *Adv. Math.* **318** (2017), 1-45 (plus Mathematica Notebook file, with March Boedihardjo).
- **91.** "Determinants associated to traces on operator bimodules," *J. Operator Theory* **78** (2017), 119-134 (with Fedor Sukochev and Dmitriy Zanin).
- **90.** "KMS quantum symmetric states," *J. Math. Phys.* **58** (2017), 012103, 12 pp (with Kunal Mukherjee).
- 89. "Quantum symmetric states on free product C*-algebras," Trans. Amer. Math. Soc. 369 (2017), 645-679 (with Claus Köstler and John Williams).
- 88. "On reduction theory and Brown measure for closed unbounded operators," *J. Funct. Anal.* 371 (2016), 3403-3422 (with Joseph Noles, Fedor Sukochev and Dmitriy Zanin).
- 87. "Algebras of log-integrable functions and operators," Complex Anal. Oper. Theory 10 (2016), 1775–1787 (with Fedor Sukochev and Dmitriy Zanin).
- 86. "Generating functions for purely crossing partitions," Australas. J. Comb. 66 (2016), 276-287.

- 85. "Instances of the Kaplansky-Lvov multilinear conjecture for polynomials of degree three," *Linear Algebra Appl.* 508 (2016), 272-288 (with Igor Klep).
- **84.** "Principal functions for bi-free central limit distributions," *Integral Equations Operator Theory* **85** (2016), 91-108 (with Wonhee Na).
- 83. "Synchronous correlation matrices and Connes' embedding conjecture," J. Math. Phys. 57 (2016), 015214, 12pp (with Vern Paulsen).
- 82. "Holomorphic functional calculus on upper triangular forms in finite von Neumann algebras," *Illinois J. Math.* 59 (2015), 819-824 (with Fedor Sukochev and Dmitriy Zanin).
- 81. "A decomposition theorem in II₁-factors," *J. reine angew. Math.* 708 (2015), 97-114 (with Fedor Sukochev and Dmitriy Zanin).
- 80. "Holder's inequality for roots of symmetric operator spaces," *Studia Math.* 228 (2015), 47-54, (with Anna Skripka),
- 79. "On stable finiteness of group rings," Alg. Discrete Math. 19 (2015), 44-47, (with Kate Juschenko).
- 78. "Finitely presented groups related to Kaplansky's direct finiteness conjecture," *Exp. Math.* 24 (2015), 326–338, (with Timo Heister and Kate Juschenko).
- 77. "Characterization of singular numbers of products of operators in matrix algebras and finite von Neumann algebras," *Bull. Sci. math.* 139 (2015), 400–419, (with Hari Bercovici, Benoit Collins and Wing Suet Li).
- **76.** "The simplex of tracial quantum symmetric states," *Studia Math.* **255** (2014), 203-218, (with Yoann Dabrowski and Kunal Mukherjee)
- **75.** "Primitivity of unital full free products of residually finite dimensional C*-algebras," *J. Funct. Anal.* **267** (2014), 4519-4558, (with Francisco Torres-Ayala).
- **74.** "Tail algebras of quantum exchangeable random variables," *Proc. Amer. Math. Soc.* **142** (2014), 3853-3863, (with Claus Köstler).
- 73. "Upper triangular Toeplitz matrices and real parts of quasinilpotent operators," *Indiana Univ. Math. J.* 63 (2014), 53-75, (with Junsheng Fang and Anna Skripka).
- **72.** "Sofic dimension for discrete measured groupoids," *Trans. Amer. Math. Soc.* **366** (2014), 707-748, (with David Kerr and Mikael Pichot).
- 71. "Perturbation formulas for traces on normed ideals," Commun. Math. Phys. 325 (2014), 1107-1138, (with Anna Skripka).
- **70.** "Addendum to "Connes' embedding conjecture and sums of hermitian squares"," *Adv. Math.* **252** (2014), 805-811, (with Sabine Burgdorf, Igor Klep and Markus Schweighofer).
- **69.** "The amalgamated free product of hyperfinite von Neumann algebras over finite dimensional subalgebras," *Houston J. Math.* **39** (2013), 1313-1339, (with Daniel Redelmeier).
- **68.** "The Horn inequalities for submodules," *Acta Sci. Math. (Szeged)* **79** (2013), 17-30, (with Hari Bercovici and Wing Suet Li).
- **67.** "Correction of proofs in 'Purely infinite simple C*-algebras arising from free product constructions' and a subsequent paper," *Canad. J. Math.* **65** (2013), 481-484, (with Pere Ara and Mikael Rørdam).
- **66.** "Measure-multiplicity of the Laplacian masa," *Glasgow Math. J.* **55** (2013), 285-292, (with Kunal Mukherjee).
- **65.** "The carpenter and Schur–Horn problems for masas in finite factors," *Illinois J. Math.* **56** (2012), 1313-1329, (with Junsheng Fang, Don Hadwin and Roger Smith).

- **64.** "On single commutators in II₁-factors," *Proc. Amer. Math. Soc.* **140** (2012) 931–940, (with Anna Skripka).
- **63.** "Free products of sofic groups with amalgamation over monotileably amenable groups," *Münster J. Math.* **4** (2011), 101–118, (with Benoît Collins).
- **62.** "Matrices of unitary moments," *Math. Scand.* **109** (2011), 225–239 (with Kate Juschenko).
- **61.** "A description of amalgamated free products of finite von Neumann algebras over finite dimensional subalgebras," *Bull. London Math. Soc.* **43** (2011), 63–74.
- **60.** "A non-convex asymptotic quantum Horn body," New York J. Math. **17** (2011), 437–444, (with Benoit Collins).
- **59.** "Sums-of-squares results for polynomials related to the Bessis-Moussa-Villani conjecture," *J. Stat. Phys.* **139** (2010), 779–799, (with Benoit Collins and Franisco Torres–Ayala).
- **58.** "Intersections of Schubert varieties and eigenvalue inequalities in an arbitrary finite factor," *J. Funct. Anal.* **258** (2010), 1579–1627, (with Hari Bercovici, Benoit Collins, Wing Suet Li and Dan Timotin).
- **57.** "Unique mixing of the shift on the C*-algebras generated by the q-canonical commutation relations," *Houston Math. J.* **36** (2010), 275–281, (with Francesco Fidaleo).
- **56.** "Brown measure and iterates of the Aluthge transform for some operators arising from measurable actions," *Trans. Amer. Math. Soc.* **361** (2009), 6583–6593, (with Hanne Schultz).
- 55. "Higher order spectral shift," J. Funct. Anal. 257 (2009), 1092–1132, (with Anna Skripka).
- **54.** "Unique ergodicity of free shifts," J. Operator Theory **61** (2009), 279–294 (with Beatriz Abadie).
- **53.** "On a reduction procedure for Horn inequalities in finite von Neumann algebras," *Oper. Matrices* **3** (2009), 1–40, (with Benoit Collins).
- **52.** "Free entropy dimension in amalgamated free products," *Proc. London Math. Soc.* **97** (2008), 339–367, (with Nathanial Brown and Kenley Jung, and with an appendix by Wolfgang Lück).
- **51.** "Generators of II₁ factors," *Oper. Matrices* **2** (2008), 555–582, (with Allan Sinclair, Roger Smith and Stuart White).
- **50.** "A linearization of Connes' embedding problem," New York J. Math. **14** (2008), 617–641, (with Benoit Collins).
- **49.** "Non-conjugate \mathbf{Z}_{p^2} -actions on free product factors," *J. Operator Theory* **57** (2007), 267–301, (with Maria Grazia Viola).
- **48.** "The free entropy dimension of some $L^{\infty}[0,1]$ -circular operators," *Internat. J. Math.* **18** (2007), 613–631, (with Gabriel Tucci).
- **47.** "Multilinear function series and transforms in free probability theory," *Adv. Math.* **208** (2007), 351–407.
- **46.** "Manifold structure of spaces of spherical tight frames," *Int. J. Pure Appl. Math.* **28** (2006), 217–256, (with Nate Strawn).
- **45.** "Isomorphisms of Cayley graphs of surface groups," *Algebra Discrete Math.* **2006**, 18–37, (with Marek Bozejko and Franz Lehner).
- **44.** "Values of the Pukanszky invariant in free group factors and the hyperfinite factor," *J. Funct. Anal.* **240** (2006), 373–398, (with Allan Sinclair and Roger Smith).
- 43. "On the S-transform over a Banach algebra," J. Funct. Anal. 231 (2006), 90–110.

- **42.** "Symmetric random walks on certain amalgamated free product groups," in *Topological and Asymptotic Aspects of Group Theory*, R. Grigorchuk, M. Mihalik, M. Sapir and Z. Sunik, (eds.), Proceedings in Contemporary Mathematics, vol. 394, American Math. Soc., Providence, 2006, pp. 87–99.
- **41.** "Hyperinvariant subspaces for some B-circular operators," *Math. Ann.* **333** (2005), 485–523, (with an appendix by Gabriel Tucci).
- **40.** "The microstates free entropy dimension of any DT-operator is 2," *Documenta Math.* **10** (2005), 247–261, (with Kenley Jung and Dimitri Shlyakhtenko).
- **39.** "The completely bounded approximation property for extended Cuntz–Pimsner algebras," *Houston J. Math.* **39** (2005), 829–840, (with Roger Smith).
- **38.** "Sums of commutators in ideals and modules of type II factors," Ann. Inst. Fourier (Grenoble) **55** (2005), 931–971, (with Nigel Kalton).
- **37.** "Popa algebras with free group factor representations," *J. reine angew. Math.* **573** (2004), 157–180, (with Nathanial Brown).
- **36.** "Ellipsoidal tight frames and projection decompositions of operators," *Illinois J. Math.* **48** (2004), 477–489 (with Dan Freeman, Keri Kornelson, David Larson, Marc Ordower and Eric Weber).
- **35.** "Commutator structure of operator ideals" *Adv. Math.* **185** (2004), 1–79, (with Tadeusz Figiel, Gary Weiss and Mariusz Wodzicki).
- **34.** "Subfactors of free products of rescalings of a II₁-factor," *Math. Proc. Cambridge Philos. Soc.* **136** (2004), 643–656.
- **33.** "On embeddings of full amalgamated free product C*-algebras," *Proc. Amer. Math. Soc.* **132** (2004), 2019–2030, (with Scott Armstrong, Ruy Exel and Hanfeng Li).
- **32.** "Invariant subspaces of the quasinilpotent DT-operator," *J. Funct. Anal.* **209** (2004), 332–366, (with Uffe Haagerup).
- **31.** "DT–operators and decomposability of Voiculescu's circular operator," *Amer. J. Math.* **162** (2004), 121–189, (with Uffe Haagerup).
- **30.** "Exactness of reduced amalgamated free product C*-algebras," Forum Math. **16** (2004), 161–180.
- **29.** "Generating functions for moments of the quasi-nilpotent DT-operator," Adv. Appl. Math. **30** (2003), 545–561, (with Catherine Yan).
- 28. "Rescalings of free products of II₁-factors," *Proc. Amer. Math. Soc.* 131 (2003), 1813–1816, (with Florin Radulescu).
- 27. "Free subproducts and free scaled products of II₁-factors," J. Funct. Anal. 194 (2002), 142–180.
- **26.** "Topological entropy of free product automorphisms," *Acta Math.* **189** (2002), 1–35, (with Nathanial Brown and Dimitri Shlyakhtenko).
- **25.** "Purely infinite, simple C*-algebras arising from free product constructions, II," *Math. Scand.* **90** (2002), 73–86.
- **24.** "Embeddings of reduced free products of operator algebras," *Pacific J. Math.* **199** (2001), 1–19, (with Etienne Blanchard).
- 23. "Exactness of Cuntz-Pimsner C*-algebras," *Proc. Edinburgh Math. Soc.* 44 (2001), 425–444, (with Dimitri Shlyakhtenko).
- **22.** "Invariant subspaces of Voiculescu's circular operator," *Geom. Funct. Anal.* **11** (2001), 693–741, (with Uffe Haagerup).

- 21. "Topological entropy of some automorphisms of reduced amalgamated free product C*-algebras," Ergodic Theory Dynam. Systems 21 (2001), 1683–1693.
- 20. "Projections in free product C*-algebras, II," Math. Z. 234 (2000), 103–113 (with Mikael Rørdam).
- 19. "Purely infinite, simple C*-algebras arising from free product constructions, III," *Proc. Amer. Math. Soc.* 128 (2000), 3269–3273, (with Marie Choda).
- **18.** "Compressions of free products of von Neumann algebras," *Math. Ann.* **316** (2000), 61–82 (with Florin Rădulescu).
- 17. "Some groups whose reduced C*-algebras have stable rank one," *J. Math. Pures Appl.* 78 (1999), 591–608 (with Pierre de la Harpe).
- **16.** "The stable rank of tensor products of free product C*-algebras," *J. Operator Theory* **41** (1999), 139–149.
- **15.** "Simplicity and the stable rank of some free product C*-algebras," *Trans. Amer. Math. Soc.* **351** (1999), 1–40.
- 14. "Spectral characterization of sums of commutators II," J. reine angew. Math. 504 (1998), 127–137 (with N.J. Kalton).
- **13.** "Purely infinite simple C*-algebras arising from free product constructions," *Canad. J. Math.* **50** (1998), 323–341 (with Mikael Rørdam,).
- 12. "Faithfulness of free product states," J. Funct. Anal. 154 (1998), 223–229.
- 11. "Projections in free product C*-algebras," Geom. Funct. Anal. 8 (1998), 1–16 (with Mikael Rørdam).
- 10. "The stable rank of some free product C*-algebras," *Duke Math. J.* 90 (1997), 95–121, "correction," 94 (1998), 213 (with Uffe Haagerup and Mikael Rørdam).
- 9. "Two applications of free entropy," Math. Ann. 308 (1997), 547–558.
- 8. "Free products of finite dimensional and other von Neumann algebras with respect to non-tracial states," Fields Inst. Commun. 12 (1997), D. Voiculescu ed., pp. 41–88.
- 7. "Amalgamated free products of multi-matrix algebras and a construction of subfactors of a free group factor," American J. Math. 117 (1995), 1555–1602.
- **6.** "Crossed product decompositions of a purely infinite von Neumann algebra with faithful, alomst periodic weight," *Indiana Univ. Math. J.* **44** (1995), 433–450.
- **5.** "Factoriality and Connes' invarient T(M) for free products of von Neumann algebras," *J. reine.* angew. Math. **450** (1994), 159–180.
- 4. "Interpolated free group factors," Pacific J. Math. 163 (1994), 123–135.
- **3.** "On the Fock representation of the q-commutation relations," *J. reine. angew. Math.* **440** (1993), 201–212 (with Alexandru Nica).
- 2. "Free products of hyperfinite von Neumann algebras and free dimension," Duke Math. J. 69 (1993), 97–119.
- 1. "On certain free product factors via an extended matrix model," J. Funct. Anal. 112 (1993), 31–60.

Book

D.V. Voiculescu, K.J. Dykema, A. Nica, Free Random Variables, CRM Monographs 1, American Mathematical Society, 1992.

Articles in Conference Proceedings (not peer reviewed)

- "Unitarily invariant trace extensions beyond the trace class," in *Operator Theory: Adv. Appl.* **114**, Birkhäuser Verlag, 2000, pp. 59-65 (with Gary Weiss and Mariusz Wodzicki).
- "Free products of exact groups," in *Proceedings of the Workshop in C*-algebras, Münster, Germany, March 1999*, J. Cuntz and S. Echterhoff (Eds.), Springer-Verlag, 2000, pp. 61–70.

Papers on Chemistry

- Frederick W. King, Kenneth J. Dykema, "Bounds for the atomic Hartree–Fock electronic density," J. Phys. B: At. Mol. Phys. 16 (1983), 2071-2077.
- Krishnan Raghavachari, Jayaramman Chandresekhar, Mark S. Gordon, Kenneth J. Dykema, "Theoretical study of silylene insertion into N–H, O–H, F–H, P–H, S–H and Cl–H Bonds," *J. Am. Chem. Soc.* **106** (1984), 5853-5859.
- Kenneth J. Dykema, Tranh N. Truong, Mark S. Gordon, "Studies of Silicon-Phosphorus Bonding,"
 J. Am. Chem. Soc. 107 (1985), 4535-4541.
- Rozeanne Steckler, Kenneth J. Dykema, Franklin B. Brown, Gene C. Hancock, Donald G. Truhlar, Trina Valencich, "A comparative study of potential energy surfaces for methyl + molecular hydrogen → methane + atomic hydrogen," J. Chem. Phys. 87 (1987), 7024-7035.
- Frederick W. King, Kenneth J. Dykema, Alan D. Lund, "Calculation of some integrals for the atomic three–electron problem," *Phys. Rev. A* **46** (1992), 5406-5416.
- Frederick W. King, Kenneth J. Dykema, Brian D. Dalke, "Nonlinear programming approach to locally constrained variational calculations: He and H- in the Hartree–Fock approximation," *J. Chem. Phys.* **96** (1992), 2889-2894.

Talks

Research level lecture series and short courses

- "On spectral distributions and decompositions of operators in finite von Neumann algebras," Summer School on Free Probability, Random Matrices and Applicationsm, University of Wyoming, Laramie, June 2022, (2.5 hours).
- "Upper Triangular forms in finite von Neumann algebras," Southern Ontario Operator Algebras Seminar, University of Waterloo, Ontario, February 2018, (2 hours).
- "Brown measure and invariant subspaces," (main speaker) Short Course of the Simnario Interinstitucional del Matrices Aleotoirias (SIMA), UNAM (National Autonomous University of Mexico), Mexico City, September 2015, (4.5 hours)
- "Free Group Factors," (one of five speakers), Master Class on Free Probability Theory, University of Münster, Germany, September 2013, (3 hours).
- "Free Probability," (one of two speakers; also Roland Speicher held lectures); lectures associated with the program Bialgebras and free probability, Erwin Schroedinger Institute, Vienna Austria, February/March 2011 (10.5 hours each).
- "Free Probability Theory," Chennai, India, July/August 2010, jointly with Roland Speicher, (15 hours each).
- "On matrix approximants of operators in finite von Neumann algebras," annual Korean Winter School, the mountains near Daegu, South Korea, December 2009 (5.5 hours).
- "Random matrices, free probability and invariant subspaces," Operator Algebras and Random Matrices, Ambleside, England, U.K., July 2004 (4 hours).
- "Free products of C*-algebras," ICMS, Edinburgh, Scotland, April 2000 (three hours).
- "Von Neumann algebras related to free groups and free products," Institut Henri Poincaré, Paris, January 2000 (6 hours).
- "Free probability theory and operator algebras," Summer School in Operator Algebras, Odense University, August 1996 (6 hours).

- "Free products of von Neumann algebras," Odense University, November/December, 1995 (8 hours).
- "Free probability and von Neumann algebras," Seoul National University, Seoul, Korea, February 1995 (9 hours).

As plenary or distinguished speaker at conferences (selected)

- SUMIRFAS, Texas A&M University, August 2022, (60 minutes).
- IWOTA (International Workshop on Operator Theory and Applications), Lancaster, UK, August, 2021, (50 minutes, via Zoom).
- Noncommutative Calculus and the Spectral Action, University of New South Wales (Australia), August, 2019, (40 minutes).
- Workshop on Applications to Random Matrices and Free Probability of Noncommutative Functions, Fields Institute, Toronto, June, 2019, (45 minutes).
- Operator Algebras Conference in Memory of Etienne Blanchard, Paris, April, 2019 (50 minutes).
- Free Probability: the theory, its extensions; CRM program on Free Probability, Centre de Recherches Mathematiques, Montreal, March, 2019 (40 minutes).
- Nebraska-Iowa Functional Analysis Seminar, University of Nebraska, Lincoln, November, 2018, (45 minutes).
- Shanks workshop on Free Probability and Applications, Vanderbilt University, Nashville, TN, September, 2018, (50 minutes).
- Operator Theory 27, Timisoara, Romania, July, 2018 (two talks, each of 40 minutes).
- Interactions between Operator Space Theory and Quantum Probability with Applications to Quantum Information, Oberwolfach, May, 2018, (60 minutes).
- Brazos Analysis Seminar, Baylor University, March, 2018, (60 minutes).
- Seminar Interinstitucional de Matrices Aleatorias, CIMAT, Guanajuato, Mexico, November, 2017 (60 minutes).
- Wabash Miniconference, IUPUI, Indianapolis, September 2017 (50 minutes).
- C*-algebras, Oberwolfach, August 2016, (40 minutes).
- Von Neumann Algebras, Hausdorff Institute, Bonn, Germany July 2016, (50 minutes).
- Symposium in Honor of Uffe Haagerup, University of Copenhagen June 2016, (45 minutes).
- Workshop on Noncommutative Analysis, University of Iowa June 2016, (45 minutes).
- GPOTS (Great Plains Operator Theory Symposium), University of Illinois, Urbana-Champaign, May 2016. (30 minutes).
- Free Probability and Large N Limit, V, Berkeley, March 2016, (40 minutes).
- From Commutators to BCP operators, (workshop in honor of Carl Pearcy), Texas A&M University, July 2015, (50 minutes).
- Canadian Operator Symposium, (in honor of George Elliott), Waterloo, Ontario, June 2015, (50 minutes).
- Multivariate Operator Theory, Banff International Research Station, April 2015, (50 minutes).
- Operator Spaces, Quantum Probability and Applications, Besancon, France, December 2014,(50 minutes).
- Real Algebraic Geometry With A View Toward Systems Control and Free Positivity, Oberwolfach, April 2014 (40 minutes).
- Free Probability and Large N Limit, IV, Berkeley, March 2014 (45 minutes).
- IWOTA (International Workshop on Operator Theory and Applications), Bangalore, India, December 2013 (60 minutes).
- Danish/Norwegian Operator Algebra Workshop, Copenhagen, December 2013 (30 minutes).
- East Coast Operator Algebra Symposium, Cincinnati, October 2013 (50 minutes).
- Noncommutative Geometry, Mathematisches Forschugszentrum Oberwolfach (MFO), September 2013 (50 minutes).

- Stochastic, and Operator Algebraic Aspects of Noncommutative Distributions and Free Probability, Fields Institute, Toronto, July 2013 (50 minutes).
- Operator spaces, harmonic analysis and quantum probability, Madrid, June 2013 (50 minutes).
- College of Sciences colloquium, University of New South Wales (UNSW), Sydney, Australia, November 2013, (50 minutes).
- 24th International Conference on Operator Theory, Timisoara, Romania, July 2012 (40 minutes).
- Workshop on Connes' embedding problem, Neuchatel, Switzerland, April 2012 (50 minutes).
- Free Probability and Large N Limit III, UC-Berkeley, March 2012 (45 minutes).
- Conference on von Neumann algebras and related topics, RIMS, Kyoto, Japan, January 2012 (50 minutes).
- Finite-dimensional approximations of discrete groups, Mathematisches Forschugszentrum Oberwolfach, May 2011, (45 minutes).
- 4th EU-Noncommutative Geometry Conference, IMAR, Bucharest Romania, April 2011, (45 minutes).
- Groups acting on measured spaces, Texas A&M, March 2011, (45 minutes).
- Bialgebras and free probability, Erwin Schroedinger Institute, Vienna, February 2011, (45 minutes).
- West Coast Operator Algebras Symposium, Pachuca, Mexico, September 2010, (50 minutes).
- ICM satellite conference on Operator Algebras, Chennai, India, August 2010 (45 minutes).
- Non-commutative Harmonic Analysis, Bedlewo, Poland, July 2010 (two talks, 45 minutes and 1 hour).
- Noncommutative Geometry and Operator Algebras, Vanderbilt University, Nashville TN, May 2010 (50 minutes).
- Danish-Norwegian Operator Algebras meeting, Copenhagen, Denmark, April 2010 (45 minutes).
- C*-algebras, Oberwolfach, Germany, March 2010 (40 minutes).
- Free Probability and Large N Limit II, Inst. of Pure and Applied Math., Los Angeles, February 2010 (45 minutes).
- Noncommutative Lp-spaces, Operator Spaces and Applications, CIRM, Luminy, France, June 2009 (45 minutes).
- North British Functional Analysis Seminar, Belfast, UK, November, 2008 (2 × 50 minutes).
- C*-algebras, Oberwolfach, Germany, August, 2008 (50 minutes).
- GPOTS (The 28th Annual Great Plains Operator Theory Symposium), University of Cincinnati, May 2008 (50 minutes).
- Fields Institute Workshop around Connes' Embedding Problem, Ottawa, Ontario, May, 2008 (60 minutes).
- Von Neumann Algebras and Applications, Banff International Research Station, March, 2008 (50 minutes).
- Free Probability, Extensions and Applications, Banff International Research Station, January, 2008, (40 minutes).
- CRM-University of Ottawa Distinguished Lecture, November, 2007 (50 minutes).
- Von Neumann algebra workshop, Fields Institute, Toronto, November, 2007 (50 minutes).
- 28th Quantum Probability conference, CIMAT, Guanajuato, Mexico, September, 2007 (40 minutes).
- 5th annual ECOAS (East Coast Operator Algebras Symposium), Wellesley, MA, September, 2007 (55 minutes).
- Operator spaces and group algebras, Banff International Research Station, Banff, Canada, August, 2007 (50 minutes).
- Operator spaces, noncommutative Lp-spaces and applications, CIRM, Luminy, France, June 2007, (45 minutes).
- Free probability, operator spaces and von Neumann algebras, Sibiu, Romania, June 2007 (45 minutes).

- Free probability and large N limit, UC-Berkeley, March 2007 (45 minutes).
- Recent advances in von Neumann algebras, La Sapienza, Rome, Italy, November 2006, (50 minutes).
- Von Neumann algebras, Banff International Research Station, Banff, Canada, September 2006, (30 minutes).
- 21st International Conference in Operator Theory, Timisoara, Romaina, July 2006 (40 minutes).
- Beyond Amenability, UCLA, May, 2006, (30 minutes).
- Operator Algebras and Applications, Odense, Denmark, April, 2006, (40 minutes).
- C*-algebraen, Oberwolfach workshop, September, 2005, (40 minutes).
- Wabash Mini-conference, Indianapolis, September, 2005, (50 minutes).
- Invariant Subspaces, Old and New, conference in honor of Carl Pearcy's 70th birthday, College Station, Texas, August 2005, (50 minutes).
- Operator Algebras and Applications, Cork, Ireland, June, 2005 (2 × one hour).
- Noncommutative Geometry and Operator Algebras Conference, Vanderbilt University, Nashville, May, 2005, (50 minutes).
- Free Probability Workshop, Oberwolfach, Germany, March, 2005, (50 minutes).
- Free Probability, Banff International Research Station, October, 2004, (30 minutes).
- The Abel Symposium, Oslo, Norway, September 2004 (45 minutes).
- Canadian Operator Symposium, Waterloo, Ontario, May 2004 (50 minutes).
- Von Neumann algebras conference, CIRM, Luminy, France, February 2004, (45 minutes).
- Free Probability Workshop, University of California, Berkeley, August 2003, (60 minutes).
- Recent applications of von Neumann algebras, UCLA, May 2003 (30 mintues)
- GPOTS (The 23rd Annual Great Plains Operator Theory Symposium), University of Illinois, May 2003 (50 mintues).
- Random Matrices and Related Topics, Sandbjerg Manor, Denmark, January 2003 (45 minutes).
- SUMIRFAS, Texas A&M University, July 2002, (50 minutes).
- Entropy in Operator Algebras workshop, Inst. of Pure and Applied Math., Los Angeles, July 2002, (60 minutes).
- Workshop on Linear Analysis and Probability, Texas A&M University, June 2002, (60 minutes).
- C*-algebras workshop, Oberwolfach, Germany, Decmeber 2001, (45 minutes).
- Free Probability Workshop, Fields Institute, Toronto, Canada, Decmeber 2001, (50 minutes).
- Operator Algebras and Mathematical Physics, Constanta, Romania, July 2001, (45 minutes)
- Free probability and noncommutative Banach spaces workshop, MSRI, Berkeley, January 2001, (50 minutes).
- Wabash miniconference, Indianapolis, October 2000, (50 minutes).
- Operator Theory Conference, OT18, Timisoara, Romania, June 2000, (45 minutes).
- Free Probability Theory and Random Matrices workshop, Sandbjerg Castle, Denmark, June 2000, (45 minutes).
- Workshop on Free Probability, Institut Henri Poincaré, Paris, January 2000, (one hour).
- SUMIRFAS, Texas A&M University, August 1999 (principal speaker, 2 × one hour).
- Operator Theory on the Prarie, Regina, Saskatchewan, August 1999 (2 × one hour).
- Workshop in C*-algebras, Münster, Germany, March 1999, (one hour).
- Workshop at the Erwin Schrödinger Institute, Vienna, January 1999, (2 × 45 minutes).
- Noncommutative Geometry Conference, Copenhagen, Denmark, August 1998, (30 minutes).
- C*-algebras Conference, Mathematisches Forschunginstitut, Oberwolfach, February 1998, (50 minutes).
- Free Probability and Operator Spaces Conference, CIRM, Luminy, France, January 1998 (60 minutes).
- Von Neumann Algebras and Dynamical Systems Conference, Nordfjordeid, Norway, August 1997 (45 minutes).
- North British Functional Analysis Seminar, Edinburgh, April 1996, $(2 \times \text{one hour})$.

- Operator Algebra Free Products and Random Matrices Workshop, Fields Institute, Waterloo, Ontario, March 1995 (80 minutes).
- Informal Regional Functional Analysis Seminar, San Antonio, Texas, November 1994 (one hour).
- West Coast Operator Algebra Symposium, Los Angeles, September 1994 (one hour).
- ICM Sattelite Conference in Operator Algebras, Geneva, July 1994 (30 minutes).
- Quantum Probability Conference, Nottingham, England, March 1993 (30 minutes).
- Quantenstochastic Conference, Mathematisches Forschunginstitut, Oberwolfach, December 1991 (45 minutes).

Other invited research conference and seminar talks (selected)

- University of California, San Diego, January 2021 (50 minutes, via Zoom).
- Univesity of Rome II, February 2019, (55 minutes).
- University of California Berkeley, April 2018 (100 minutes).
- University of Delaware, March 2018 (50 minutes).
- University of Saarland, Saarbrücken, Germany, March 2017 (60 minutes).
- Analysis seminar, University of Waterloo (Ontario, Canada) January 2017, (50 minutes).
- Analysis seminar, University of New South Wales October 2016, (50 minutes).
- Mathematics Seminar, University College Cork (Ireland) January 2016 (50 minutes).
- Analytic versus Combinatorial in Free Probability Theory, Banff International Research Station (BIRS), December 2016, (25 minutes).
- IWOTA (International Workshop on Operator Theory and Applications), Washington University in St. Louis, July 2016, (20 minutes).
- Free Probability Theory, Oberwolfach, June 2015, (25 minutes).
- Analysis Seminar, University of Houston, January 2014, (50 minutes).
- Functional Analysis seminar, Copenhagen University, December 2013, (50 minutes).
- IWOTA (International Workshop on Operator Theory and Applications), Sydney, Australia, July 2012 (two talks of 30 minutes each).
- Seminar talks, Dalian University of Technology, Dalian, China, January 2012 (2 seminars, each 50 minutes).
- Analysis Seminar, University of Houston, October 2011 (50 minutes).
- Wolfgang Woess' seminar, Techincal University of Graz, Austria, March 2011, (50 minutes).
- Probabilistic Operator Algebras Seminar, UC-Berkeley, February 2010 (120 minutes).
- Analysis Seminar, Queens University (Kingston, Ontario), January 2010 (55 minutes).
- Analysis Seminar, University of Glasgow (U.K.), November 2008 (55 minutes).
- Analysis Seminar, University of Oxford (U.K.), October 2008 (55 minutes).
- Analysis Seminar, University of Houston, October 2008 (55 minutes).
- C*-Algebras Seminar, University of Münster, Germany, June 2007 (90 minutes).
- Analysis Seminar, SUNY Buffalo, April 2007 (60 minutes).
- Probability Seminar, University of Lyon 1, France, July 2006 (60 minutes).
- C*-algebras Seminar, University of Münster, Germany, July 2005 (90 minutes).
- Schrohe's Seminar, University of Hannover, June 2005, (90 minutes).
- Operator Algebras Seminar, University of Southern Denmark, Odense, April, 2005, (90 minutes).
- Analysis Seminar, University of Edinburgh, U.K., March, 2005, (60 minutes).
- Structure Theory Seminar, Technical University of Graz, Austria, January, 2005, (60 minutes).
- Analysis Seminar, University of Münster, Germany, December, 2004, (45 minutes).
- Analysis Seminar, University of Wroclaw, Poland, November, 2004, (90 minutes).
- Operator Algebras Seminar, University of Southern Denmark in Odense, October, 2004, (75 minutes).
- Operator Algebras Seminar, University of Copenhagen, October, 2004, (75 minutes).
- Operator Algebras Seminar, University of Southern Denmark, January 2003 (90 minutes).

- Geometric Operator Algebras Seminar, Pennsylvania State University, November 2002, (90 minutes).
- Operator Algebras Seminar, University of Southern Denmark, May 2002, (90 minutes).
- Seminar, Sonderforschungsbereich "Geometrische Structuren in der Mathematik", Münster, Germany, July 2001, (75 minutes).
- Dietmar Bisch's seminar, UC-Santa Barbara, May 2001 (90 minutes).
- Sorin Popa's seminar, UCLA, May 2001, (60 minutes).
- MSRI weekly seminar, Berkeley, CA, April 2001, (60 minutes).
- Voiculescu's seminar, Probablistic Operator Algebras, UC-Berkeley, February 2001, (90 minutes).
- Noncommutative dynamical systems and simple C*-algebras workshop, MSRI, September 2000, (30 minutes).
- Danish-Norwegian Operator Algebras Conference, Schaeffergaarden, Copenhagen, August 2000, (25 minutes).
- International Colloquium on Operator Algebras, Landschloss Ort, Austria, February 1999, (30 minutes).
- Collége de France, December 1998, (90 minutes).
- Aarhus Univeristy, Analysis Seminar, March 1997 (90 minutes)
- University of Copenhagen Operator Algebra Seminar, November 1996, (90 minutes).
- C*-algebras Conference, Mathematisches Forschunginstitut, Oberwolfach, April 1996 (30 minutes).
- Seminar Talk, Oslo University, March 1996 (90 minutes).
- Functional Analysis Colloquium, University of California at Berkeley, September, 1995 (one hour).
- Seminar Talk, University of Kyushu, February 1995 (one hour).
- Seminar Talk, University of Tokyo, February 1995 (two hours).
- Seminar Talks in Hiedelberg, Germany, January 1993, January 1992 and August 1991.

Invited colloquium talks

University of Konstanz, Germany (06/2017); University of New South Wales, Australia (10/2016); University of Saarland, Germany (07/2016); Baylor University (11/2015); University of Iowa (01/2015); University of Münster, Germany (01/2012); Texas Christian University (11/2011); University of Konstanz, Germany, (07/2011); University of Konstanz (07/2010); University of Münster (06/2010); University of Waterloo (03/2010); University of Göttingen (07/2009); University of Texas — San Antonio (04/2008); Indiana University (10/2007); Vanderbilt University (03/2007); University of Waterloo (10/2003); Ohio State University (02/2002); University of Houston (03/2000); Purdue University (09/1999); University of Missouri, Columbia (09/1999); Texas A&M University (10/1999); University of Texas, Austin (10/1999); Oslo University (3/1996); Odense University (11/1995) and many times thereafter); University of Tokyo (02/1995); University of Houston (11/1994); University of Oregon (05/1993).

Other talks at conferences

- AMS Sectional, National or International meeting invited special session talks (20 minutes unless otherwise indicated): San Diego, 2018; Memphis, 2015 (45 minutes); Chicago, 2015 (45 minutes); San Antonio, 2015; Balitmore, 2014 (45 minutes + 45 minutes); Knoxville, 2014 (45 minutes); Albuquerque, 2014; Alba Iulia, Romaina, 2013 (50 minutes + 50 minutes); Seoul, Korea, 2009; Bloomington, IN, 2008; Athens, OH, 2004; Bloomington, IN, 2003 (40 minutes). Irvine, CA, 2001; Odense, Denmark, 2000, (45 minutes); Austin, Texas, 1999; Eugene, Oregon, 1994.
- GPOTS (Great Plains Operator Theory Symposia): Fort Worth, 2017; Manhattan, KS, 2014; Berkeley, 2013; Houston, 2012; Iowa City, 2006; Cincinnatti, 1995; Lincoln, NE 1994; Boulder, 1993; Iowa City, 1992.
- Wabash: Bloomington, IN, 2001.

• Canadian Operator Symposia: Waterloo, Ontario, 1995; Victoria, British Columbia, 1993; Montreal, Quebec, 1991.

Funding

Research Grants

- NSF DMS-1800335, (sole investigator, 8/012018 7/31/2021), \$180,000.
- Simons Foundation Collaboration Grant (524187, K.D., 9/01/2017-8/31/2022), \$42,000, took only one year (for \$8,500) and declined the remainder.
- NSF DMS-1202660, (sole investigator, 9/01/2012 8/31/2016), \$177,000.
- NSF DMS-0901220, (sole investigator, 7/01/2009 6/30/2012), \$245,223.
- NSF DMS-0600814, (sole investigator, 7/01/2006 6/30/2009), \$178,350.
- NSF DMS-0300336, (sole investigator, 7/15/2003 6/30/2006), \$120,000.
- NSF DMS-0070558, (sole investigator, 8/15/2000 7/31/2003), \$87,171.
- while working in Odense, travel was supported by different grants that were shared by several operator algebraists in Denmark.

Conference Grants

- NSF DMS-1900745, Great Plains Operator Theory Symposium 2019 (PI, with co-PIs M. Anshelevich, M. Brannan, D. Kerr, Z. Xie), \$49,999.
- NSF DMS-1900856, Travel Support For Us Participants In Focus Program "New Developments In Free Probability" at the Centre de Recherches Mathematiques, Montreal, PI, \$25,000.
- NSF DMS-0855328, (co-PI, with M. Anshelevich, D. Kerr, R. Smith), \$27,160.

Teaching

Graduate students supervised (at Texas A&M University, unless otherwise noted):

- John Griffin, (Ph.D. 2021)
- Amudhan Krishnaswamy–Usha, (Ph.D. 2020 (Dec.))
- Wonhee Na, (Ph.D. 2018 (Dec.))
- Joseph Noles, (Ph.D. 2017 (Dec.))
- Daniel Redelmeier (Ph.D. 2012)
- Francisco Torres-Avala (Ph.D. 2012)
- Gabriel Tucci (Ph.D. 2009)
- Kunal Mukherjee (Ph.D. 2009)
- Nikolay Ivanov (Ph.D. 2007)
- Nate Strawn (M.S. 2007)
- Mette Jensen (Cand. Scient., Odense University, 1998)

Member of thesis committee or defense panel (in Mathematics at Texas A&M University unless otherwise noted):

- John Weeks (current Ph.D. 2022; advisor Michael Brannan).
- Priyanga Ganesan (current Ph.D. 2022; advisor Michael Brannan).
- Jacob Mashburn (current Ph.D. 2022; advisor Michael Anshelevich).
- Kari Eifler (current Ph.D. 2021; advisor Michael Brannan).
- Xin Ma (Ph.D. 2019; advisor David Kerr).
- David Buzinski, (M.S. 2018; advisor Michael Anshelevich).
- Yi Wang, (Ph.D. 2018; advisor Ron Douglas and Emil Straube).
- Zhichao Wang, (M.S. 2018; advisor Michael Anshelevich).

- Brian Huslar, (M.S. 2018; Statistics Dept., advisor Michael Longnecker).
- Sam Scholze, (Ph.D. 2017; advisor David Larson).
- Yeong Chyuan Chung, (Ph.D. 2017; advisor Guoliang Yu).
- Minh Kha (Ph.D. 2017, advisor Peter Kuchment)
- Christopher Ostertag, (M.A. 2016; Philosophy Dept., advisor Robert Garcia).
- Carlos Ortiz (University of Houston Ph.D. 2015(Dec.), advisor Vern Paulsen)
- Timothy Rainone (Ph.D. 2015, advisor David Kerr)
- Wai Kit Chan (Ph.D. 2015, advisor Roger Smith)
- Patrick Orchard, (M.S. 2015; advisor David Kerr)
- Amy Johnson, (M.A. 2013; Philosophy Dept., advisor Chris Menzel)
- Kate Juschenko (Ph.D. 2011, advisor Gilles Pisier)
- Sabine Burgdorf (University of Konstanz, Ph.D. 2011, advisor Markus Schweighofer)
- Liviu Paunescu (University of Rome II, Ph.D. 2011, advisor Florin Rădulescu)
- James Hitchcock (Ph.D. 2010, advisor David Kerr)
- Jan Cameron (Ph.D. 2009, advisor Roger Smith)
- Detelin Dosev (Ph.D. 2009, advisor Bill Johnson)
- Charlie Siu, (M.A. Philosophy 2008, advisor Chris Menzel)
- Pratyush Proddutur, (M.S. Electrical Engineering 2007)
- Allan Wiggins (Ph.D. 2007, advisor Roger Smith)
- Samangi Munasinghe, (Ph.D. 2006, advisor Emil Straube)
- Mihael Neagu, (University of Waterloo, Ph.D. 2006, advisor Alexandru Nica)
- Sangshin Kwak, (Ph.D. Electrical Engineering, 2004)
- Lars Aagaard, (University of Southern Denmark, Ph.D. 2004, advisor Uffe Haagerup)

Courses taught (at Texas A&M University unless otherwise specified).

- Graduate Courses: Free Probability Theory; Free Probability Theory (Münster); Functional Analysis II; Methods of Applied Mathematics (a service course for engineers); Noncommutative Real Algebra; Operators on Hilbert Space II (Odense); Real Analysis I and II; various reading courses.
- Undergraduate Courses: Advanced Calculus I; Advanced Calculus II; Complex Function Theory; Complex Function Theory (Odense); Differential Equations; Elements of Topology (Odense); Engineering Calculus I; Engineering Calculus III; Frames, Group Representations and Wavelets; Introduction to Probability; Linear Algebra (Odense); Linear Algebra for Engineers.

Service

Editing

- Editor of special issue in honor of Dan Voiculescu's 70th birthday (jointly with H. Bercovici and A. Nica), J. Operator Theory, 2019-2020.
- Cooperating Editor, J. Operator Theory, starting 2011
- Editorial Advisory Board member, London Math. Soc., (for the Bulletin, Journal and Proceedings of the LMS), January 2013 December 2018.

Organization of meetings conferences and seminars

- Special Session at IWOTA (International Workshop on Operator Theory and Applications), Lancaster, U.K., August, 2021 (with Jani Virtanen).
- GPOTS (Great Plains Operator Theory Symposium), Texas A&M University, May, 2019 (with Michael Anshelevich, Michael Brannan, David Kerr, David Larson, Roger Smith, Zhizhang Xie, Guoliang Yu).

- Special Sessioon on Von Neumann Algebras and Related Fields, AMS Sectional Meeting, Eau Claire, Wisconsin, Septeber 2014, (with Steve Avsec).
- Concentration Week in Free Probability, Texas A&M University, July 2014, (with Michael Anshelevich and John Williams).
- Special session of Free Probability and Free Analysis, AMS/MAA joint meeting, San Diego, January 2013, (with Scott McCullough)
- Special session on Operator Theory and Operator Algebras, KMS/AMS joint meeting, Seoul, Korea, December 2009, (with Ja A. Jeong, Il Bong Jung, George Exner).
- ECOAS 2009 (the 7th Annual East Coast Operator Algebras Symposium, Texas A&M, October, 2009 (with Michael Anshelevich, David Kerr and Roger Smith).
- Free probability, operator spaces and von Neumann algebras, Sibiu, Romania, June 2007 (member of scientific committee, with Florin Rădulescu).
- Concentration Week in Free Probability, Texas A&M, July, 2007 (with Michael Anshelevich).
- Concentration Week in Free Probability and Noncommutative Lp Spaces, Texas A&M University, August 2004, (with Gilles Pisier).
- GPOTS 2004 (the 24th annual Great Plains Operator Theory Symposium), Texas A&M University, May 2004 (with David Larson, Roger Smith, Ron Douglas, Nico Spronk, Carl Pearcy),.
- Linear Analysis Seminar (Texas A&M), 2000–2008, except for Fall 2004, Spring 2005, Fall 2007.
- MaPhySto conference on Free Probability and Random Matrices, Sandbjerg Castle, Denmark, June 2000, (with U. Haagerup).
- MaPhySto meeting on Free Probability, Odense University, May 1999, (with U. Haagerup).

Committees (Mathematics Department at Texas A&M University, for two year terms)

• Executive Committee (thrice), Graduate Committee (thrice), Subcommittee P (for promotions to full professor), Subcommittee P&T, for promotion and tenure, (thrice, one year as chair), Postdoctoral Committee (chair)

Refereeing

- Refereed papers for the following journals: Adv. Math.; AMS Contemp. Math.; Ann. Prob.; Arch. Math.; Banach J. Math. Anal.; Bull. London Math. Soc.; Canadian J. Math.; Duke Math. J.; Forum Math.; Geom. Funct. Anal.; Glasgow Math. J.; Houston J. Math.; Illinois J. Math.; Inf. Dim. Anal. Quantum Prob.; Integral Equations Op. Th.; Internat. J. Math. Math. Sci.; Internat. Math. Research Notices; Invent. Math.; J. Amer. Math. Soc.; J. Comb. Th. A; J. Funct. Anal.; J. Funct. Anal. Appl.; J. Operator Theory; J. Phys. A; J. reine angew. Math.; Math. Ann.; Math. Proc. Cambridge Philos. Soc.; Math. Scand.; Operator Algebras Appl. (series); Operators and Matrices; Operator Theory (series); Pacific J. Math.; Prob. Theory Related Fields; Proc. Amer. Math. Soc.; Proc. Edinburgh Math. Soc.; Proc. London Math. Soc.; Publ. I.H.E.S.; Rev. Roumaine Math. Pures Appl.; Studia Math.; Tohoku Math. J.; Trans. Amer. Math. Soc.
- Refereed books for various publishers.
- Refereed grant applications for NSF (USA) on panels and individually, and for agencies of other countries.