

Sean O'Rourke

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Education

Ph.D. Mathematics, University of California, Davis, 2011.

M.A. Mathematics, University of California, Davis, 2008.

B.S. Mathematics, California Polytechnic State University, 2006.

Appointments & Experience

University of Colorado Boulder
Department of Mathematics
Assistant Professor

August 2014 – Present

Yale University
Department of Mathematics
Postdoctorate Associate

August 2012 – July 2014

Rutgers University
Department of Mathematics
Triennial Assistant Professor of Mathematics

September 2011 – July 2012

Affiliated Faculty Appointment

University of Colorado Boulder
Department of Applied Mathematics
Affiliated Faculty

April 2017 – Present

Publications

1. Andrew Campbell and Sean O'Rourke. Spectrum of Heavy-Tailed Elliptic Random Matrices. Submitted. Available at [arXiv:2010.01261](https://arxiv.org/abs/2010.01261), 2020.
2. Vishesh Jain, Indrajit Jana, Kyle Luh, and Sean O'Rourke. Circular law for random block band matrices with genuinely sublinear bandwidth. Submitted. Available at [arXiv:2008.03850](https://arxiv.org/abs/2008.03850), 2020.
3. Kyle Luh and Sean O'Rourke. Eigenvectors and controllability of non-Hermitian random matrices and directed graphs. Submitted. Available at [arXiv:2004.10543](https://arxiv.org/abs/2004.10543), 2020.
4. Sean O'Rourke and Noah Williams. Partial linear eigenvalue statistics for non-Hermitian random matrices. Submitted. Available at [arXiv:1912.08856](https://arxiv.org/abs/1912.08856), 2019.
5. Sean O'Rourke and Stefan Steinerberger. A nonlocal transport equation modeling complex roots of polynomials under differentiation. *Proceedings of the American Mathematical Society*, to appear.

6. Sean O'Rourke and Tulasi Ram Reddy. Sums of random polynomials with independent roots. *Journal of Mathematical Analysis and Applications*, 495(1): 124719, 2021.
7. Sean O'Rourke and Noah Williams. On the local pairing behavior of critical points and roots of random polynomials. *Electronic Journal of Probability*, 25:no. 100, 68 pp., 2020.
8. Kyle Luh and Sean O'Rourke. Eigenvector delocalization for non-Hermitian random matrices and applications. *Random Structures & Algorithms*, 57(1):169–210, 2020.
9. Natalie Coston and Sean O'Rourke. Gaussian Fluctuations for Linear Eigenvalue Statistics of Products of Independent iid Random Matrices. *Journal of Theoretical Probability*, 33(3):1541–1612, 2020.
10. Sean O'Rourke, Van Vu, and Ke Wang. Random perturbation and matrix sparsification and completion. Available at arXiv:1803.00679, 2018.
11. Phil Kopel, Sean O'Rourke, and Van Vu. Random matrix products: Universality and least singular values. *Annals of Probability*, 48(3):1372–1410, 2020.
12. Natalie Coston, Sean O'Rourke, and Philip Matchett Wood. Outliers in the spectrum for products of independent random matrices. *Annales de l'Institut Henri Poincaré Probabilités et Statistiques*, 56(2):1284–1320, 2020.
13. Sean O'Rourke and Behrouz Touri. Littlewood-Offord theory and controllability of random structures. In *2016 IEEE 55th Conference on Decision and Control (CDC)*, pages 5195–5200, Dec 2016.
14. Sean O'Rourke and Noah Williams. Pairing between zeros and critical points of random polynomials with independent roots. *Transactions of the American Mathematical Society*, 371(4):2343–2381, 2019.
15. Sean O'Rourke and Philip Matchett Wood. Low-degree factors of random polynomials. *Journal of Theoretical Probability*, 32(2):1076–1104, 2019.
16. Sean O'Rourke, Van Vu, and Ke Wang. Eigenvectors of random matrices: a survey. *Journal of Combinatorial Theory. Series A*, 144:361–442, 2016.
17. Sean O'Rourke and Behrouz Touri. On a conjecture of Godsil concerning controllable random graphs. *SIAM Journal on Control and Optimization*, 54(6):3347–3378, 2016.
18. Sean O'Rourke and Philip Matchett Wood. Spectra of nearly Hermitian random matrices. *Annales de l'Institut Henri Poincaré Probabilités et Statistiques*, 53(3):1241–1279, 2017.
19. Sean O'Rourke and Behrouz Touri. Controllability of random systems: Universality and minimal controllability. Available at arXiv:1506.03125, 2015.
20. Sean O'Rourke. Critical points of random polynomials and characteristic polynomials of random matrices. *International Mathematics Research Notices. IMRN*, (18):5616–5651, 2016.
21. Sean O'Rourke and David Renfrew. Central limit theorem for linear eigenvalue statistics of elliptic random matrices. *Journal of Theoretical Probability*, 29(3):1121–1191, 2016.
22. Sean O'Rourke, David Renfrew, Alexander Soshnikov, and Van Vu. Products of independent elliptic random matrices. *Journal of Statistical Physics*, 160(1):89–119, 2015.
23. Sean O'Rourke, Van Vu, and Ke Wang. Random perturbation of low rank matrices: improving classical bounds. *Linear Algebra and its Applications*, 540:26–59, 2018.

24. Sean O'Rourke and David Renfrew. Low rank perturbations of large elliptic random matrices. *Electronic Journal of Probability*, 19:no. 43, 65 pp., 2014.
25. Hoi H. Nguyen and Sean O'Rourke. On the concentration of random multilinear forms and the universality of random block matrices. *Probability Theory and Related Fields*, 162(1-2):97–154, 2015.
26. Sean O'Rourke and Van Vu. Universality of local eigenvalue statistics in random matrices with external source. *Random Matrices: Theory and Applications*, 3(2):1450005, 37 pp., 2014.
27. Sean O'Rourke and Alexander Soshnikov. Partial linear eigenvalue statistics for Wigner and sample covariance random matrices. *Journal of Theoretical Probability*, 28(2):726–744, 2015.
28. Hoi H. Nguyen and Sean O'Rourke. The elliptic law. *International Mathematics Research Notices. IMRN*, (17):7620–7689, 2015.
29. Sean O'Rourke. A note on the Marchenko-Pastur law for a class of random matrices with dependent entries. *Electronic Communications in Probability*, 17:no. 28, 13 pp., 2012.
30. Sean O'Rourke. Fluctuations of matrix entries of analytic functions of non-Hermitian random matrices. *Random Matrices: Theory and Applications*, 1(3):1250008, 22 pp., 2012.
31. Sean O'Rourke, David Renfrew, and Alexander Soshnikov. Fluctuations of matrix entries of regular functions of sample covariance random matrices. *Theory of Probability and its Applications*, 58(4):615–639, 2014.
32. Sean O'Rourke, David Renfrew, and Alexander Soshnikov. On fluctuations of matrix entries of regular functions of Wigner matrices with non-identically distributed entries. *Journal of Theoretical Probability*, 26(3):750–780, 2013.
33. Sean O'Rourke and Alexander Soshnikov. Products of independent non-Hermitian random matrices. *Electronic Journal of Probability*, 16:no. 81, 2219–2245, 2011.
34. Pierre Dueck, Sean O'Rourke, David Renfrew, and Alexander Soshnikov. Spectral properties of large random matrices with independent entries. In *Noncommutative harmonic analysis with applications to probability III*, volume 96 of *Banach Center Publ.*, pages 115–134. Polish Acad. Sci. Inst. Math., Warsaw, 2012.
35. Sean O'Rourke. Gaussian fluctuations of eigenvalues in Wigner random matrices. *Journal of Statistical Physics*, 138(6):1045–1066, 2010.

Honors, Awards, & Grants

PI of National Science Foundation (NSF) grant No. DMS-1810500, Eigenvectors of Large-Dimensional Random Matrices and Graphs, 2018–2021, \$81,533.00.

Co-PI of National Science Foundation (NSF) grant No. ECCS-1610003, Stochastic Approach to Control of Large Scale Networks, 2016–2019, \$296,558.00 (PI: Behrouz Touri).

AMS-Simons Travel Grant, July 2012 – June 2015.

Henry L. Alder Prize for Excellence in Teaching, University of California, Davis, 2010.

VIGRE Summer Research Fellowship, University of California, Davis, Summer 2010.

VIGRE Research Fellowship, University of California, Davis, Winter 2010.

VIGRE Summer Research Fellowship, University of California, Davis, Summer 2009.

VIGRE Research Fellowship, University of California, Davis, Spring 2009.

VIGRE Research Fellowship, University of California, Davis, Spring 2008.

Outstanding Mathematics Senior, California Polytechnic State University, 2006.

Dean's List, California Polytechnic State University, 2002 – 2006.

Presentations & Posters

Invited talk at the AMS Fall Southeastern Sectional Meeting Special Session “Polynomials, Approximation Theory, and Potential Theory,” October 2020.

Contributed (virtual prerecorded) talk at the Bernoulli-IMS One World Symposium Special Session “Random matrices,” August 2020.

Invited talk at the AMS Fall Western Sectional Meeting Special Session “Random Matrices and Related Structures,” November 2019.

Invited talk at the Yale University Analysis-Combinatorics Joint Seminar, October 2019.

Invited talk at the Workshop on High-Dimensional Covariance Operators and their Applications, Humboldt University, Berlin, September 2019.

Invited talk at the University of California, Irvine Probability Seminar, May 2019.

Invited talk at the Georgia Institute of Technology High Dimensional Seminar, April 2019.

Invited talk at the Harvard University Random Matrix & Probability Theory Seminar, November 2018.

Invited talk at the Princeton University Topics in Probability Seminar, November 2018.

Invited talk at the AMS Fall Central Sectional Meeting Special Session “Random Matrix Theory Beyond Wigner and Wishart,” October 2018.

Invited talk at the Sums & Products of Random Matrices workshop at the ZiF Center for Interdisciplinary Research, Bielefeld University, Germany, August 2018.

Invited talk at the Case Western Reserve University Department of Mathematics, Applied Mathematics and Statistics Colloquium, April 2018.

Invited talk at the Colorado State University Applied Mathematics Seminar, March 2018.

Invited talk at the University of Colorado Boulder Applied Mathematics Stochastics Seminar, November 2017.

Invited talk at the AMS Fall Western Sectional Meeting Special Session “Random Matrices: Theory and Applications,” November 2017.

Invited talk at the University of California, San Diego Electrical and Computer Engineering Colloquium, November 2017.

Invited talk at the University of Colorado Boulder Applied Mathematics Colloquium, October 2016.

Invited session talk at the World Congress in Probability and Statistics hosted by the Fields Institute, Toronto, July 2016.

Invited talk at the Ohio State University Combinatorics and Probability Seminar, June 2016.

Invited talk at the AMS Spring Western Sectional Meeting Special Session "Topics in Probability," April 2016.

Invited talk at the University of Denver Analysis and Dynamics Seminar, November 2015.

Minisymposium talk at the 2015 SIAM Conference on Applied Linear Algebra, October 2015.

Invited talk at the University of Colorado Colorado Springs (UCCS) Department of Mathematics Colloquium, September 2015.

Invited talk at the Random Matrices, Random Growth Processes and Statistical Physics Workshop at the Simons Center for Geometry and Physics, September 2015.

Contributed talk at the 17th International Conference on Random Structures and Algorithms (RS&A2015) at Carnegie Mellon University, July 2015.

Invited talk at the University of Colorado Boulder Probability Seminar, February 2015.

Invited talk at the University of Wisconsin-Madison Probability Seminar, September 2014.

Invited talk at the ICERM Workshop on Eigenvectors in Graph Theory and Related Problems in Numerical Linear Algebra, May 2014.

Invited talk at the Temple University Probability Seminar, April 2014.

Invited talk at the University of Michigan Analysis/Probability Seminar, April 2014.

Invited talk at the University of Virginia Harmonic Analysis and PDEs Seminar, March 2014.

Invited talk at the University of Mississippi Department of Mathematics, January 2014.

Invited talk at the University of Massachusetts Amherst Department of Mathematics and Statistics, January 2014.

Invited talk at Indiana University Bloomington Department of Mathematics, January 2014.

Invited talk at the University of Connecticut Department of Mathematics, January 2014.

Invited talk at the University of Rochester Department of Mathematics, January 2014.

Invited talk at the 2014 Joint Mathematics Meetings AMS Special Session on Random Matrices, January 2014.

Invited talk at the University of Colorado Boulder Department of Mathematics, December 2013.

Contributed talk at the 36th Conference on Stochastic Processes and their Applications, August 2013.

Invited talk at the University of California, Los Angeles Participating Analysis Seminar, March 2013.

Invited talk at the Yale University Combinatorics and Probability Seminar, November 2012.

Poster presentation for the Random Matrix Workshop at Hausdorff Center for Mathematics, May 2012.

Invited talk at the University of Pennsylvania Combinatorics and Probability Seminar, April 2012.

Invited talk at the University of Colorado Boulder Probability Seminar, March 2012.

Invited talk at the University of California, Davis Mathematical Physics & Probability Seminar, February 2011.

Invited talk at the University of Alberta Department of Mathematical and Statistical Sciences, January 2011.

Short talk at the Arizona School of Analysis with Applications, March 2010.

Poster presentation at the V Brunel Workshop on Random Matrix Theory, December 2009.

Talk at the University of California, Davis Student-Run Math Seminar, October 2009.

Talk at the University of California, Davis Student-Run Discrete Math Seminar, November 2007.

Teaching Experience

Courses Taught at the University of Colorado Boulder

- Spring 2021:** MATH 3001: Analysis 1
- Fall 2020:** FYSM (First Year Seminar): Impossible or Implausible: Paradoxes and Puzzles
MATH 6350: Functions of a Complex Variable 1
- Spring 2020:** MATH 2400: Calculus 3 (course coordinator and instructor for 2 sections)
- Spring 2019:** MATH 4520: Introduction to Mathematical Statistics
- Fall 2018:** FYSM (First Year Seminar): Impossible or Implausible: Paradoxes and Puzzles
- Spring 2018:** MATH 4520: Introduction to Mathematical Statistics
MATH 6320: Introduction to Real Analysis 2
- Fall 2017:** MATH 4510: Introduction to Probability Theory
- Fall 2016:** MATH 6350: Functions of a Complex Variable 1
- Spring 2016:** MATH 3001: Analysis 1
MATH 4520: Introduction to Mathematical Statistics
- Fall 2015:** MATH 6310: Introduction to Real Analysis 1
- Spring 2015:** MATH 3001: Analysis 1
MATH 4510: Introduction to Probability Theory
- Fall 2014:** MATH 6534: Topics in Mathematical Probability

Undergraduate Student Independent Study at the University of Colorado Boulder

- Spring 2021:** Controllability of Random Graph Laplacians (cont.). Kyle Schneider
- Fall 2020:** Controllability of Random Graph Laplacians. Kyle Schneider
- Fall 2019:** Random Graphs (cont.). Poramate Nakkirt
- Spring 2019:** Random Graphs. Poramate Nakkirt
Random Polynomials. Megan Collins
- Spring 2018:** Spectral Properties of Random Graphs. Megan Sochinski
The Probabilistic Method. Ian Gossett

Graduate Student Independent Study at the University of Colorado Boulder

- Spring 2019:** Probability Theory. Sangman Lee, Joel Ornstein, and Yu Wang
- Fall 2018:** Entries of Functions of Random Matrices. Shumin Zeng
Random Matrix Theory. Andrew Campbell
- Spring 2015:** Markov Chains and Mixing Times. Natalie Coston and Noah Williams

Courses Taught at Rutgers University

- Spring 2012:** Multivariable Calculus
 Mathematical Theory of Statistics
Fall 2011: Introductory Linear Algebra
 Multivariable Calculus

Courses Taught at the University of California, Davis

- Summer 2011:** Linear Algebra
Fall 2010: Differential Calculus
Spring 2010: Calculus for Biology and Medicine
Fall 2009: Trigonometry
Fall 2008: Precalculus
Summer 2008: Linear Algebra
Fall 2007: Trigonometry
Summer 2007: Vector Analysis

Supervision*Completed Doctoral Graduate Students*

Noah Williams, Ph.D. May 2019
 Thesis: *On the pairing between zeros and critical points of random polynomials with independent roots*

Natalie Coston, Ph.D. May 2018
 Thesis: *Spectral Properties of Products of Independent Random Matrices*

Current Doctoral Graduate Students

Andrew Campbell, candidate

Isabelle Kraus, candidate

Completed Masters' Students

Shumin Zeng, M.A. 2018
 Presentation: *Matrix entries of analytic functions of random matrices*

Current Master's Students

Yuwei Jia

Postdoctoral Scholars

Philip Kopel, 2016–2018

Summer Research Experience Supervision

- Summer 2020:** Sums of random polynomials
Gabriel Lopez (CU graduate student), Levi Lorenzo (CU graduate student), Franny McWilliams (CU undergraduate), Kyle Schneider (CU undergraduate)
- Summer 2019:** Sums of random polynomials (as part of the CU Science Discovery STEM Research Experience Program)
Arjun Ramani (high school student), Eojin Lee (high school student)
- Summer 2018:** Invertible random matrices
David Atkinson (CU undergraduate), Andrew Campbell (CU graduate student), Megan Collins (CU undergraduate), Christopher Dudley (CU undergraduate), Yueqi Pan (CU undergraduate)
- Summer 2016:** Critical points of random polynomials and random matrices
Krisztina Dearborn (CU graduate student), Ian Gossett (CU undergraduate), Shen Lu (CU graduate student), Isaac Vance (CU undergraduate), Katherine Zagnoli (CU undergraduate), Shumin Zeng (CU undergraduate)

Undergraduate Honors Thesis Supervision

Megan Collins - summa cum laude, May 2020

Thesis: *Distribution and Properties of the Critical Values of Random Polynomials with Non-Independent and Non-Identically Distributed Roots*

Poramate Nakkirt - magna cum laude, December 2019

Thesis: *Limiting Moments of the Eigenvalue Distribution of the Watts–Strogatz Random Graph*

Megan Sochinski - magna cum laude, May 2018

Thesis: *Finding Planted Cliques in Erdős–Rényi Random Graphs: Improving previous methods and expanding applications*

Conference & Workshop Participation

2020 Joint Mathematics Meetings, January 2020.

AMS Fall Western Sectional Meeting, November 2019.

High-Dimensional Covariance Operators and their Applications at Humboldt University, Berlin, September 2019.

41st Stochastic Processes and their Applications Conference, July 2019.

AMS Fall Central Sectional Meeting, October 2018.

Sums & Products of Random Matrices workshop at the ZiF Center for Interdisciplinary Research, Bielefeld University, Germany, August 2018.

AMS Fall Western Sectional Meeting, November 2017.

AMS Fall Western Sectional Meeting, October 2016.

World Congress in Probability and Statistics hosted by the Fields Institute, Toronto, July 2016.

AMS Spring Western Sectional Meeting, April 2016.

SIAM Conference on Applied Linear Algebra, October 2015.

Random Matrices, Random Growth Processes and Statistical Physics Workshop at the Simons Center for Geometry and Physics, September 2015.

17th International Conference on Random Structures and Algorithms (RS&A2015) at Carnegie Mellon University, July 2015.

ICERM Workshop on Eigenvectors in Graph Theory and Related Problems in Numerical Linear Algebra, May 2014.

2014 Joint Mathematics Meetings, January 2014.

36th Conference on Stochastic Processes and their Applications, August 2013.

AMS Short Course on Random Matrices at the 2013 Joint Mathematics Meetings, January 2013.

Random Matrix Workshop at the Hausdorff Center for Mathematics, May 2012.

105th Statistical Mechanics Conference, May 2011.

Random Matrices Workshop at the American Institute of Mathematics, December 2010.

Random Matrix Theory and its Applications II Workshop at MSRI, December 2010.

Random Matrix Theory and its Applications I Workshop at MSRI, September 2010.

Arizona School of Analysis with Applications, March 2010.

V Brunel Workshop on Random Matrix Theory, December 2009.

Random Matrix Theory Graduate Workshop at MSRI, July 2009.

Service & Leadership

Service to the Department of Mathematics at the University of Colorado Boulder

Kempner Colloquium Organizer (August 2015 – Present).

Probability Seminar Organizer (August 2014 – Present).

Undergraduate Committee (August 2014 – July 2015; August 2017 – July 2018; August 2019 – Present).

Primary Unit Evaluation Committee for Dr. Albert Bronstein's Reappointment as Instructor (Fall 2020).

Faculty mentor to Kyle Luh (August 2020 – Present).

Course Coordinator, Calculus 3, 13 sections (Spring 2020).

Faculty Hiring Committee (September 2019 – January 2020).

Committee for Lower Division Curriculum Matters (August 2018 – July 2019).

Diversity Committee (August 2016 – July 2017).

Analysis Preliminary Examination Committees for Fall 2015, Fall 2016, Fall 2018, and Fall 2020 exams.

Service to Other Departments at the University of Colorado Boulder

Department of Electrical, Computer and Energy Engineering Faculty Search Committee (September 2017 – April 2018).

Service to the University of Colorado Boulder

Advisory Board for the First Year Seminar Program (Fall 2020).

Ph.D. Dissertation Committees at the University of Colorado Boulder

Zhenhua Wang, Department of Mathematics, Spring 2020

Saeed Khalili, Department of Mathematics, Fall 2019

Noah Williams, Department of Mathematics, Spring 2019 (advisor)

Natalie Coston, Department of Mathematics, Spring 2018 (advisor)

Peter Willis, Department of Applied Mathematics, Spring 2018

Ian Long, Department of Mathematics, Fall 2017

Master's Defense Committees at the University of Colorado Boulder

Richard Dyer, Department of Mathematics, Fall 2018

Shumin Zeng, Department of Mathematics, Fall 2018 (advisor)

Isabel Corona, Department of Mathematics, Spring 2018

Kellin Peltine, Department of Mathematics, Spring 2018

Brendt Gerics, Department of Mathematics, Spring 2018

Patrick Normile, Department of Mathematics, Spring 2016

Xiaorong Lie, Department of Mathematics, Spring 2016

Undergraduate Honors Thesis Committees at the University of Colorado Boulder

Megan Collins, Department of Mathematics, Spring 2020 (advisor)

Poramate Nakkirt, Department of Mathematics, Fall 2019 (advisor)

Megan Sochinski, Department of Mathematics, Spring 2018 (advisor)

Manna Chen, Department of Economics, Spring 2016

Comprehensive Examination Committees at the University of Colorado Boulder

Zhe Feng, Department of Electrical, Computer and Energy Engineering, Fall 2019.

Andrew Campbell, Department of Mathematics, Spring 2019 (advisor)

Albany Thompson, Department of Mathematics, Fall 2018

Krisztina Dearborn, Department of Mathematics, Spring 2018

Braden Balentine, Department of Mathematics, Fall 2017

Noah Williams, Department of Mathematics, Fall 2016 (advisor)

Saeed Khalili, Department of Mathematics, Fall 2016

Ian Long, Department of Mathematics, Fall 2015

Natalie Coston, Department of Mathematics, Fall 2015 (advisor)

Kathleen Smith, Department of Mathematics, Fall 2014

Special Session Organization

Co-organizer of the Special Session “Random matrices and integrable systems” at the 2020 Joint Mathematics Meetings, January 2020.

Organizer of the Contributed Session “Random matrices” at the 41st Stochastic Processes and their Applications Conference, July 2019.

Co-organizer of the Special Session “Random matrices, integrable systems, and applications” at the AMS Fall Western Sectional Meeting, October 2016.

Co-organizer of the mini-symposium “Randomness in Spectral Analysis” at the SIAM Conference on Applied Linear Algebra, October 2015.

Referee

Reviewer for Swiss National Science Foundation, April 2020.

Referee for the following journals and conferences:

Annales de l'Institut Henri Poincaré, Probabilités et Statistiques

Annals of Applied Probability

Annals of Statistics

Bernoulli Journal

Communications in Contemporary Mathematics

Discrete Mathematics

Duke Mathematical Journal

Electronic Communications in Probability

Electronic Journal of Probability

EPL (Europhysics Letters)

International Mathematics Research Notices

Israel Journal of Mathematics
Journal of Mathematical Analysis and Applications
Journal of Mathematical Physics
Journal of Statistical Physics
Journal of Statistical Planning and Inference
Journal of Theoretical Probability
Linear Algebra and its Applications
Potential Analysis
Probability Theory and Related Fields
Proceedings of the American Mathematical Society
Proceedings of Symposia in Applied Mathematics
Random Matrices: Theory and Applications
SIAM Journal on Matrix Analysis and Applications (SIMAX)
Statistics & Probability Letters
Transactions of the American Mathematical Society

Outside Thesis Committees

Andrei Florin Deneanu, Applied Mathematics, Yale University, Spring 2019 (Ph.D. thesis reader)
Alkéos Michail, Applied Mathematics, Paris Descartes University, Spring 2018 (Ph.D. thesis reader)
Oanh Nguyen, Mathematics, Yale University, Spring 2017 (Ph.D. thesis reader)
Jean Rochet, Applied Mathematics, Paris Descartes University, Spring 2016 (Ph.D. thesis reader)

Outreach Talks

Invited talk at the University of Colorado Boulder Math Club, October 2019
Invited talk at the Colorado Academy Math Club, December 2018
Invited talk at the Colorado Academy Math Club, December 2017
Invited talk at the University of Colorado Boulder Math Club, November 2016

Graduate Student Mentoring

Mentor to the following incoming graduate students: Zhenhua Wang (2015–2016), Ian Miller (2018–2019), Spencer Shortt (2020–2021).

Professional Development Activities

University of Colorado Boulder

Faculty Teaching Excellence Program (FTEP): Flipping the Class for the Skeptic, December 2019

Faculty Teaching Excellence Program (FTEP): Designing a Syllabus for an Effective & Flexible Course, August 2018

First Year Seminar Training, June 2018 and August 2020.

Tenure and Promotion Workshops, October 2016, April 2018, and May 2020

Faculty Teaching Excellence Program (FTEP) Summer Assessment Institute: Achieving Course Goals: Gathering Evidence About Student Learning, May 2015

New Faculty Orientation, August 2014

Technical Skills

C, C++, L^AT_EX, Linux, HTML/CSS, MATLAB, Python.

Last updated: January 30, 2021
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