

CURRICULUM VITAE

YAIZA CANZANI

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EDUCATION

DEGREE	Ph.D. in Mathematics	September 2008 – April 2013
INSTITUTION	McGill University	Montreal, Canada
DEGREE	Bachelor in Mathematics	March 2005 – July 2008
INSTITUTION	Universidad de la República	Montevideo, Uruguay

PROFESSIONAL EXPERIENCE

• Professor, University of North Carolina at Chapel Hill	July 2024 –present
• Associate Professor, University of North Carolina at Chapel Hill	July 2021 –present
• Assistant Professor, University of North Carolina at Chapel Hill	July 2016 –July 2021
• Benjamin Peirce Fellow, Harvard University	July 2013 –June 2016
• Member, Institute for Advanced Study	July 2014 –June 2015

HONORS & AWARDS

• Hettleman Prize, UNC	2023
• AWM Sadosky Prize in Analysis	2022
• Sue Goodman and Karl Petersen Teaching Excellence Award	2021
• Selected by UNC for nomination for a Packard Fellowship Award	2019
• Sloan Research Fellowship	2018
• UNC Junior Faculty Award	2018
• Alexis D. and W. Charles Pelletier prize in Mathematics	2013
• Research Associate of Sistema Nacional de Investigadores de Uruguay	2013–present

GRANTS & FELLOWSHIPS

• Graduate Assistance in Areas of National Need (GAANN) Grant P200A240148 Department of Education.	2024-2027
• NSF RTG Grant DMS-2135998 co-PI with H. Christianson (co-PI), J. Marzuola (co-PI), J. Metcalfe (PI)	2022-2027

- NSF CAREER Grant DMS-2045494 (split evenly between the Analysis Program and the Geometric Analysis Programs) 2021–2026
- NSF Grant DMS-1900519 (funded by the Analysis Program) 2019–2023
- Sloan Research Fellowship 2018–2022
- NSERC Postdoctoral Fellowship 2014–2016
- Benjamin Peirce Fellowship 2013–2016
- Graduate Excellence Fellowship 2012–2013
- ISM Scholarship 2012–2013
- Schulich Graduate Fellowship 2010–2012
- Trottier Accelerator Fellowship 2008–2009

BIBLIOGRAPHY AND PRODUCTS OF SCHOLARSHIP

BOOKS & CHAPTERS

- Y. Canzani and J. Galkowski. Geodesic Beams in Eigenfunction Analysis. *Synthesis Lectures on Mathematics & Statistics*. Springer Nature. (2023)
- Y. Canzani. Monochromatic Random Waves for General Riemannian Manifolds (Book Chapter). In: N. Anantharaman, A. Nikeghbali M.T. Rassias (Eds.). *Frontiers in Analysis and Probability*. Springer. (2020).
- Y. Canzani, L. Chen, D. Jakobson (Editors). *Probabilistic Methods in Geometry, Topology and Spectral Theory*. Contemporary Mathematics (Vol. 739). American Mathematical Society. (2019).
- Y. Canzani. Spectral geometry (Book Chapter). In: A. Girouard (Ed.). *Spectral Theory and Applications*. Contemporary Mathematics (Vol. 720, pp. 153–186). American Mathematical Society. (2018).

REFEREED PUBLICATIONS

- T. Beck, Y. Canzani, and J. Marzuola. Uniform upper bounds on Courant sharp Neumann eigenvalues of chain domains. *The Journal of Geometric Analysis*. 34, no. 9, pp 262. (2024)
- Y. Canzani and J. Galkowski. Growth of high L^p norms for eigenfunctions: an application of geodesic beams. *Analysis and PDEs*. 16(10), pp.2267-2325 (2023).
- Y. Canzani and J. Galkowski. Weyl remainders: an application of geodesic beams. *Inventiones Mathematicae*, 232(3), pp.1195-1272 (2023).
- Y. Canzani and J. Galkowski. Improvements for eigenfunction averages: an application of geodesic beams. *Journal of Differential Geometry*. 124(3), pp. 443-522 (2023)
- Y. Canzani and J. Toth. Lower bounds for eigenfunction restrictions in lacunary regions. *Communications in Mathematical Physics*, pp.1-22 (2023).
- T. Beck, Y. Canzani, and J. Marzuola. Quantitative bounds on impedance-to-impedance operators with applications to fast direct solvers for pdes. *Pure and Applied Analysis*. 4(2), 225-256 (2022).
- G. Berkolaiko, Y. Canzani, G. Cox, and J. Marzuola. A local test for global extrema in the dispersion relation of a periodic graph. *Pure and Applied Analysis*. 4(2), 257-286 (2022).
- G. Berkolaiko, Y. Canzani, G. Cox, and J. Marzuola. Stability of spectral partitions and the Dirichlet-to-Neumann map. *Calculus of Variations and Partial Differential Equations*. 61(6), 203 (2022).
- T. Beck, Y. Canzani and J. Marzuola. Nodal line estimates for the second Dirichlet eigenfunction. *Journal of Spectral Theory*. 11(1):323–353 (2021).

- Y. Canzani and J. Galkowski. Eigenfunction concentration via geodesic beams. *Journal für die reine und angewandte Mathematik (Crelles Journal)*. 2021(775):197–257 (2021).
- Y. Canzani and B. Hanin. Local Universality for zeros and critical points of monochromatic random waves. *Communications in Mathematical Physics*. 378(3):1677–1712 (2020).
- Y. Canzani and J. Galkowski. On the growth of eigenfunction averages: microlocalization and geometry. *Duke Journal of Mathematics*. 168(16):2991–3055 (2019).
- Y. Canzani and P. Sarnak. Topology and nesting of the zero set components of monochromatic random waves. *Communications on Pure and Applied Mathematics*. 72(2):343–374 (2019).
- Y. Canzani and J. Toth. Intersection Bounds for Nodal Sets of Laplace Eigenfunctions. In: M. Hitrik, D. Tamarkin, B. Tsygan, S. Zelditch (Eds.). *Algebraic and Analytic Microlocal Analysis. AAMA 2013*. Springer Proceedings in Mathematics & Statistics (Vol. 269, pp. 421–436). Springer. (2018).
- Y. Canzani and B. Hanin. C^∞ - Scaling asymptotics for the spectral function of the laplacian. *Journal of Geometric Analysis*. 28(1):111–122 (2018).
- Y. Canzani, J. Galkowski and J. Toth. Averages of eigenfunctions over hypersurfaces. *Communications in Mathematical Physics*. 360(2):619–637 (2018).
- Y. Canzani and J. Toth. Nodal sets of Schrödinger eigenfunctions in forbidden regions. *Annales Henri Poincaré*. 17(11):3063–3087 (2016).
- Y. Canzani and B. Hanin. Scaling limit for the kernel of the spectral projector and remainder estimates in the pointwise Weyl Law. *Analysis and Partial Differential Equations*. 8(7):1707–1731 (2015).
- Y. Canzani and B. Hanin. Fixed frequency eigenfunction immersions and supremum norms of random waves. *Electronic Research Announcements in Mathematical Sciences*. 22:76–86 (2015).
- Y. Canzani, D. Jakobson and L. Silberman. Appendix of: Gaussian measures on the of space of Riemannian metrics. *Annales mathématiques du Québec*. 39:129–145 (2015).
- Y. Canzani, D. Jakobson, J. Toth. On the distribution of perturbations of propagated Schrödinger eigenfunctions. *Journal of Spectral Theory*. 4(2):307–328 (2014).
- Y. Canzani. On the multiplicity of eigenvalues of conformally covariant operators. *Annales de L'Institut Fourier*. 64(3):947–970 (2014).
- Y. Canzani, D. Jakobson, R. Gover and R. Ponge. Conformal invariants from nodal sets I. Negative eigenvalues and curvature prescription. *International Mathematical Research Notices*. 2014(9):2356–2400 (2014).
- Y. Canzani, D. Jakobson and I. Wigman. Scalar curvature and Q-curvature of random metrics. *The Journal of Geometric Analysis*. 24(4):1982–2019 (2014).
- Y. Canzani, D. Jakobson, R. Gover and R. Ponge. Nullspaces of conformally invariant operators. Applications to Q_k -curvature. *Electronic Research Announcements in Mathematical Sciences*. 20:43–50 (2013).

SUBMITTED FOR PUBLICATION

- Y. Canzani, J. Galkowski, and B. Keeler. Asymptotics for the spectral function on Zoll manifolds. (2022). Preprint arXiv:2211.09644.
- Y. Canzani and J. Galkowski. Logarithmic improvements in the Weyl law and exponential bounds on the number of closed geodesics are predominant. (2022). Preprint arXiv:2204.11921.

INVITED TALKS

- Geometric Spectral Theory and Applications Program Conference March 23-27, 2026
(ISAAC Newton Institute; Cambridge, UK)

- Mini-course Lecturer: Great Lakes Mathematical Physics Meeting (Kentucky, USA) June 6-8, 2025
- **Plenary speaker: 13th Ohio River Analysis Meeting** March 16-17, 2024
- Plenary speaker: 8vo Coloquio Uruguayo de Matemática Dec 19-21, 2023
- Spectral Geometry in the Clouds Seminar (virtual) March 6, 2023
- Princeton University Analysis Seminar [canceled for medical reasons]. (Princeton, USA) Feb 17, 2023
- Geometria em Lisboa Seminar (virtual) Jan 20, 2023
- München-Aahrus-Santiago Seminar in Mathematical Physics (virtual) Dec 5, 2022
- **Dartmouth University Mathematics Colloquium** (Dartmouth, USA) Oct 20, 2022
- UNC Analysis and PDE seminar (Chapel Hill, USA) Oct 14, 2022
- ZhengTong Chern-Weil Symposium (Chicago, USA) Oct 7-9, 2022
- **Northwestern University Mathematics Colloquium** (Evanston, USA) Oct 5, 2022
- **QMATH 15 Conference** (Davis, USA) Sep 12-16, 2022
- **Plenary speaker: 2022 Riviere-Fabes Symposium** (Minneapolis, MN) Apr 29–May 1, 2022
- MIT Analysis seminar (virtual) Apr 19, 2022
- Cirbercoloquio Latinoamericano de Matemáticas (virtual) Mar 25, 2022
- Plenary speaker: Triangle Area Graduate Mathematics Conference 2021. Duke University (Durham, NC) Nov 13, 2021
- Conference on Harmonic Analysis and Symmetric Spaces (virtual). Oct 27–29, 2021
- 33rd. Brazilian Colloquium of Mathematics (virtual). Aug 4, 2021
- Analysis Seminar at Institute for Advanced Study (virtual). May 17, 2021
- Analysis on Singular Spaces, BIRS workshop (virtual). May 7, 2021
- **Invited Address: Southeastern Sectional Meeting of the AMS.** (Atlanta, GA) Mar 13–14, 2021
- Analysis Seminar at Princeton University (virtual). Mar 8, 2021
- Analysis Seminar at Notre Dame University (virtual). Mar 11, 2021
- Analysis Seminar at Stanford University (virtual). Mar 12, 2021
- **Brown University Mathematics Colloquium** (virtual). Oct 28, 2020
- Conference on Random Nodal Domains. (Rennes, France) Sept 7–11, 2020
(cancelled due to pandemic)
- Dima Jakobson's 50th birthday at CRM (virtual). Aug 24, 2020
- **Latinoamerican Congress of Mathematicians (CLAM).** Jul 20–24, 2020
Invited to teach a mini-course (cancelled due to pandemic)
- Monza Seminar. MIT. (virtual). May 20, 2020
- Spectral geometry in the clouds (virtual). May 18, 2020
Université Laval and University College London.
- Conference on Microlocal analysis and PDEs. (London, England) Apr 29–May 1, 2020
(cancelled due to pandemic)
- **Microlocal Analysis and Spectral Theory: A Conference in Honor of Richard Melrose** (Berkeley, CA) Oct 19–20, 2019
- **Summer school on semiclassical analysis.** (Chicago, IL) Jul 29–Aug 16, 2019
Taught a mini-course titled "Eigenfunction asymptotics".
- Conference on Microlocal Analysis and Applications. (Shanghai, China) Jun 17–21, 2019
- Conference on Microlocal Methods in Analysis and Geometry. (Luminy, France) May 6–10, 2019
- **University of Michigan at Ann Arbor Mathematics Colloquium.** (Ann Arbor, MI) Mar 26, 2019
- Differential Geometry Seminar at Harvard University. (Cambridge, MA) Mar 12, 2019
- Differential Geometry Seminar at University of Chicago. (Chicago, IL) Mar 5, 2019
- Analysis Seminar at North Carolina State University. (Raleigh, NC) Nov 7, 2018
- **Main speaker: Texas Analysis and Mathematical Physics Symposium.** Oct 26–28, 2018
(Waco, TX)

- Workshop on “Groups, Geometry and Dynamics” (Montevideo, Uruguay) Jul 23–27, 2018
- Workshop “Around Quantum chaos”. (Banff, Canada) Jul 15–20, 2018
- Workshop on “Spectral Geometry: Theory, Numerical Analysis, and Applications” (Banff, Canada) Jul 1–6, 2018
- Workshop “Random Waves in Oxford”. (Oxford, England) Jun 18–22, 2018
- Workshop on “Microlocal Analysis and its Applications in Spectral Theory, Dynamical Systems, Inverse Problems and PDE” (Batemans Bay, Australia) Mar 18–23, 2018
- Analysis Seminar at Texas A&M. (College Station, TX) Feb 9, 2018
- Spectral geometry, graphs and semiclassical analysis. (Aussois, France) Dec 11–15, 2017
- **Riemannian Geometry Past, Present and Future: an homage to Marcel Berger** (Paris, France) Dec 6–9, 2017
- Workshop on Random geometries / Random topologies at ETH. (Zurich, Switzerland) Dec 4–5, 2017
- AMS Fall Southeastern Sectional Meeting. (Orlando, FL) Sep 23–24, 2017
- Symposium on Scattering and Spectral Theory. (Florianopolis, Brasil) Jul 17–28, 2017
- AMS Spring Western Sectional Meeting. (Pullman, WA) Apr 21–23, 2017
- **Princeton University Mathematics Colloquium.** (Princeton, NJ) Apr 12, 2017
- Workshop on Random Polynomials. (Montevideo, Uruguay) Feb, 2017
- BIRS. Conference on Geometric and Spectral Methods in Partial Differential Equations. (Oaxaca, Mexico) Dec 11–16, 2016
- AMS Fall Southeastern Sectional Meeting. (Raleigh, NC) Nov 12–13, 2016
- **CRM summer school of mathematics.** (Quebec City, Canada) Jul 4–14, 2016
Taught a mini-course titled “Introduction to Spectral Geometry”.
- BIRS Conference on Dirichlet-to-Neumann Maps: Spectral Theory, Inverse Problems and Applications. (Oaxaca, Mexico) May 29–Jun 3, 2016
- Conference on Random Waves. Kings College University. (London, England) May 3–5, 2016
- **Tufts University Mathematics Colloquium.** (Medford, MA) Apr 22, 2016
- **University of Illinois at Urbana-Champaign Math Colloquium.** (Champaign, IL) Apr 14, 2016
- CMS Winter meeting. (Montreal, Canada) Dec, 2015
- CRM Summer School on Geometric and computational Spectral Theory. (Montreal, Canada) Jun 15–26, 2015
- Simons Center Conference on Quantum Geometry, Stochastic Geometry, Random Geometry, you name it. (Stony Brook, NY) . Jun 15–19, 2015
- May Midwestern Microlocal Meeting at Northwestern University. (Evanston, IL) May 16, 2015
- Geometry Seminar at Indiana University. (Bloomington, IN) Apr 16, 2015
- Analysis and PDE seminar at University of California at Berkeley. (Berkeley, CA) Mar, 2015
- Analysis seminar at Temple University. (Philadelphia, PA) Mar, 2015
- **Drexel University Mathematics Colloquium.** (Philadelphia, PA) Feb 9, 2015
- Analysis seminar at McGill University Dec, 2014
- Faculty Colloquium at Harvard University March 10, 2014
- Analysis Seminar at Northwestern University Feb 25, 2014
- PDE Seminar at University of North Carolina at Chapel Hill. Nov, 2013
- Conference on Spectral Theory of Laplace and Schrödinger Operators. Banff, Canada . Aug, 2013
- Conference on Quantum chaos, resonances and Semiclassical measures. Roscoff, France June 2013
- Workshop on Analytic Microlocal Analysis. Evanston, United States May 20-24, 2013
- CMS Winter meeting. Montreal, Canada Dec, 2012

- Analysis seminar at University of Toronto. Toronto, Canada Nov, 2012
- Workshop on manifolds of metrics and probabilistic methods in geometry and analysis. Montreal, Canada. July 2-6, 2012
- Workshop on geometry of eigenvalues and eigenfunctions. Montreal, Canada June 4-8, 2012
- Dartmouth Geometry and Topology Research seminar. Hanover, USA May 31, 2011
- CMS Winter meeting. Vancouver, Canada Dec 4-6, 2010

TEACHING ACTIVITIES

COURSES TAUGHT IN THE PAST THREE YEARS

- Math 233 –Multivariable Calculus Fall 2024
- Math 521– Advanced Calculus I Spring 2024
- Math 782– Differential Geometry Spring 2024
- Math 521– Advanced Calculus I Spring 2023
- Math 653– Introductory Analysis Fall 2022
- Math 782– Differential Geometry Spring 2022
- Math 653– Introductory Analysis Fall 2021
- Math 233– Multivariable Calculus Spring 2021

MENTORING EXPERIENCE

Graduate Students:

- Doctoral dissertation advising of Andrew Lyons. Jan 2022–present
(co-supervised with J. Marzuola)
- Doctoral dissertation advising of Madelyne Brown. Jan 2020–Apr 2024
(co-supervised with J. Galkowski)
- Doctoral dissertation advising of Blake Keeler. Aug 2017–Apr 2021
Thesis: The Two-Point Weyl Law on Manifolds without Conjugate Points
Awarded: CRM-ISM Postdoctoral Fellowship (2022-2024).
AARMS Postdoctoral Fellowship (2022-2023).
- Graduate research of a working group with graduate students Jan 2018–Apr 2019
Dmitro Golovanich and Blake Keeler. (co-supervised with J. Marzuola)

Undergraduate students:

- Jonah Boan (co-supervised with J.Marzuola) June 2024– Present
- Graham Sawyer (co-supervised with J.Marzuola) May 2024– Present
- Victoria Yan (co-supervised with J.Marzuola) Fall 2022
- Matthew de Courcy-Ireland's. Undergraduate summer project. May–Aug 2012
(co-supervised with D. Jakobson).
- Steven Pollack. Undergraduate summer project. May–Aug 2012
(co-supervised with D. Jakobson)

Postdocs:

- Hanna Kim (co-mentored with J. Marzuola) Aug 2024–Apr 2027

- Tom Beck (co-mentored with J. Marzuola) Aug 2017–Apr 2021

Junior faculty:

- Phil Tosteson (co-mentored with P. Belkale) Jul 2023–present
- Casey Rodriguez (co-mentored with K. Leiderman) Aug 2022–present

PROFESSIONAL SERVICE

CONFERENCE ORGANIZATION

- Conference: Joint Math Meetings; Member at Large on the JMM Program Committee 2025–2026
- Conference: Quantum dynamics and semiclassical analysis (in memory of Steve Zelditch) 2023–2024
June 24–Jun 28, 2024. Evanston, USA.
- Summer school: Quantum dynamics and semiclassical analysis 2023–2024
June 17–Jun 21, 2024. Evanston, USA.
- UNC PDE Mini School. April 5-6, 2024. Chapel Hill, USA. 2023–2024
- UNC PDE Mini School. March 24-26, 2023. Chapel Hill, USA. 2022–2023
- Conference Session: Spectral geometry 2019–2021
Mathematical Congress of the Americas. Moved to July 2021 due to pandemic.
- Conference Session: Geometry in Spectral and Scattering Theory. 2019–2021
CMS Ottawa 75th Anniversary Meeting. Session canceled due to pandemic.
- Summer School: Summer School in Semiclassical Analysis. 2018–2019
July 29–August 16, 2019. Evanston, USA.
- Workshop: Microlocal Analysis and its Applications 2017–2018
in Spectral Theory, Dynamical Systems, Inverse Problems and PDE”.
March 18–23, 2018. Batemans Bay, Australia.
- Conference Session: “Spectrum and dynamics” for the Mathematical 2017
Congress of the Americas. Held in July 24–28, 2017. Montreal, Canada.
- Thematic semester on probabilistic methods in geometry, 2015
topology and spectral theory. Summer&Fall of 2016.

OUTREACH AND PROMOTION OF SCIENCE

- Reviewer for L’Oréal-UNESCO For Women in Science International Awards 2024
in Physical Sciences, Mathematics and Computer Science Fall 2024
- ICTP-IMU Ramanujan Prize Selection Committee member Spring 2024
- Organizer of “Thinking of Doing a Ph.D. in Math?” Oct 2023
panel for UNC’s University Research Week.
- Panelist for “Exploring a research landscape”. GROW. Duke University. Oct 2022
- Invited speaker: AWM Chapter of the Mathematics Department at Dartmouth University. Oct 2022
- Invited speaker: UNC’s Mathematics Department Anti-Racism Community Feb 2022
- Biographic interview for book “La ciencia es cosa de mujeres” Dec 2021
by Margarita Michelini (editorial Penguin)
- Plenary speaker: Graduate Research Opportunities for Women 2021 Oct 2021
University of Illinois East Campus.

- Panelist for “Working in the Mathematical Sciences Panel”. GROW. Oct 2021
University of Illinois East Campus.
- Panelist for the Graduate Student Panel Apr 2021
“Launch Point: NC Conference for Student Mathematicians”
- Featured in *Notices of the American Mathematical Society*. ISSN 0002-9920. Mar 2021
- Interviewed in radio show *En Perspectiva: Mesa de científicos*. Jun 2020
<https://www.enperspectiva.net/tag/mesa-de-cientificos/>
- Organized and ran the booth “Sound and Waves” at the UNC Science Expo. Apr 2019
- Featured in *Semanario Búsqueda* Feb 2019
<https://www.busqueda.com.uy/nota/talentos-en-la-mira>
- Panelist for the “Carolina seminar on gender and STEM”. Nov 2018
- Biographic interview, Chapter 6 in book *Ganadas y Perdidas* by Alexis Jano Ros. Nov 2018
- Panelist for the “Academic Career Panel” for the Carolina Women in STEM program. Sep 2018
- Honoree of *Lathisms’ 2019 edition*. Sep 2018
<https://www.lathisms.org/calendar-2018/yaiza-canzani>
- Interviewed in radio show *No Toquen Nada*. Jul 2018
<https://delsol.uy/notoquennada/ntnconcentrado/una-matematica-uruguaya-que-brilla-en-eeuu-y-canada>
- Featured in *Scientists of North Carolina* on June 20, 2018. Jun 2018
<https://www.facebook.com/profile/100064720627379/search/?q=canzani>
- Mentor for a professional development activity of the WinSpire program. Jun 2018
- Interviewed by *Fundación Julio Ricaldoni*. Apr 2018
<http://www.ricaldoni.org.uy/noticias/267-un-paso-adelante-en-matematica>
- Organizer of the booth “Sound and Waves” at the UNC Science Expo. Apr 2018
- Featured in *Women in Science, CAS* Nov 2017
<https://college.unc.edu/2017/11/canzani/>
- Reviewer for the Distinguished Dissertation Award in the doctoral programs in Nov 2016
the areas of Mathematics, Physical Sciences and Engineering.
- Invited panelist in the AWM sponsored Mathematics Academic Job Search Panel. Oct 2016
- Co-organizer of a group on Gender Inclusiveness in Mathematics which aimed 2015–2016
to promote gender inclusivity among undergraduate students within Harvard
University’s mathematics department.

ACADEMIC SERVICE

Service done at University of North Carolina at Chapel Hill

SERVICE DONE AT THE MATHEMATICS DEPARTMENT

Administrative positions

- Director of Graduate Studies July 2024 – present
- Associate Chair Jan 2022–Dec 2022

Committee work

- Hiring Committee for the Analysis Assistant Professor position (Chair). Fall 2024
- Hiring Committee for the Analysis Distinguished Professor position (Chair). Fall 2024
- Chair’s Advisory Committee (elected). Fall 2022–present

- Graduate Committee. Fall 2020–present
- Hiring Committee for the Analysis Assistant Professor position (Chair). Fall 2023
- Hiring Committee for the NSF RTG postdoctoral positions. Fall 2023
- Reappointment Committee (Chair). Fall 2023
- Comprehensive Exam committee (Analysis). Fall 2022–Fall 2023
- Hiring Committee for the NSF RTG postdoctoral positions (Chair). Fall 2022
- Chair’s Advisory Committee (elected). Fall 2019–Spring 2022
- Goodman Petersen Award Committee. Spring 2022
- Comprehensive Exam committee (Geometry and Topology). Spring 2019 -Spring 2022
- Hiring Committee member for departmental job search. Fall 2021
- Instructional Budget Committee. Spring 2021
- Hiring Committee for departmental postdoc search. Fall 2020
- Undergraduate Advising Committee. Spring 2019–2021
- Member of the planning committee to create an institutional proposal for the NIH Common Fund Program: “Faculty Institutional Recruitment for Sustainable Transformation (FIRST) Program”. 2020–2021
- Hiring Committee for departmental job search. Fall 2017
- Comprehensive Exam committee (Geometry and Topology). Fall 2017 -Spring 2018

General Departmental Service

- Organizer of the Developmental Training Group seminar. Fall 2022–present
- Faculty Mentor for the Directed Reading Program. 2018–present
- Organized the UNC PDE Mini School. April 5-6, 2024. Chapel Hill, USA. 2022–2023
- Organized the UNC PDE Mini School. March 24-26, 2023. Chapel Hill, USA. 2022–2023
- Helped organize the Brauer Lectures by C. Kenig. Spring 2023
- Led project to improve the appearance of UNC’s math department (with K. Newhall). 2018–2022
- Helped redesign the Geometry and Topology first-year courses. 2019–2021
- Co-organizer of the “Analysis and PDEs seminar”. 2017–2021
- Organizer of the “PDEs Student seminar”. 2017–2019
- Math major advisor for eight undergraduate students. March 2018
- Instructor for a Reading Course on Laplace eigenfunctions. Spring 2017
- Redesign of the Calculus sequence working platform (led by C. Jones). Spring 2017

Other Service

- Junior Faculty Mentoring Committee: P. Tosteson (Fall 2023–present), C. Rodriguez, (Fall 2022–present).
- Ph.D. Dissertation Defense Committee: Maddelyne Brown (2024), Gracie Conte (2022), Taylor Rhoads (2022), Colin Kofroth (2022), Blake Keeler (2021), Dmitro Golovanich (2021), Katrina Morgan (2019), Bob Booth (2018), Jacob Perry (2018).
- Graduate Oral Exam Committee: Andrew Lyons (2024), Jeremy Wall (2024), Benjamin Bechtold (2023), Madelyne Brown (2021), Sarah Carpenter (2021), Collin Kofroth (2021), Gracie Conte (2020), Dmitro Golovanich (2019), Blake Keeler (2019), Claire Kiers (2018), Colin Guider (2018), Katrina Morgan (2017), Bob Booth (2017), Jacob Perry (2017).
- Master’s Thesis Defense Committee: Laurie Short (2023), Geneva Hall (2022).

- Undergraduate Honors Thesis Defense Committee: Marici Gupta (2021), Difan Li (2019), Katrina Wu (2019), Felix Wong (2014).
- Course coordinator: Math 521 (Spring 2024), Math 233H (Fall 2017), Math 233 (Spring 2017).

DEI trainings

- Safe Zone Ally, UNC LGBTQ Center, University of North Carolina. 2019– present

COLLEGE AND UNIVERSITY LEVEL SERVICE

- Promotion Committee – Applied Physical Sciences Department Fall 2024
- Member of the Executive Board for the Chancellor’s Science Scholars Program Spring 2023–present

Service done at Harvard University

- Assistant Director of Graduate Studies. 2015–2016
- Organizer of the Differential Geometry Seminar. 2015–2016
- Member of the Junior Advising Committee. 2013–2014