

Jo Nelson

PERSONAL INFORMATION	Rice University Department of Mathematics	jo.nelson [at] rice.edu http://math.rice.edu/~jkn3
RESEARCH INTERESTS	Symplectic and contact geometry and topology; various flavors of Floer, symplectic, and contact homologies and gauge theory; symplectic dynamics	
EMPLOYMENT	Rice University Assistant Professor, 2018- Columbia University Ritt Assistant Professor, 2017-2018 Barnard College, Columbia University NSF Postdoctoral Fellow, 2013-2014, 2016-2017	
VISITING APPOINTMENTS	Institute for Advanced Study Member, Spring 2023 Member, 2014-2016 Visitor, 2013-2014 Simons Center for Geometry and Physics, Stony Brook Visiting Assistant Professor, Spring 2014	
EDUCATION	University of Wisconsin - Madison, USA Ph.D. in Mathematics, August 2013 • Advisor: Mohammed Abouzaid M.A. in Mathematics, May 2009 Massachusetts Institute of Technology, USA Visiting Graduate Student, Spring 2012 University of Illinois at Urbana-Champaign, USA B.S. in Mathematics with High Distinction and Honors, Minor in German, August 2007 Technische Universität Berlin, Germany Trans Atlantic Science Student Exchange Program, Academic Year 2006-2007	
NSF GRANTS (SOLE PI)	NSF CAREER: Floer theories and Reeb dynamics of contact manifolds, DMS-2142694 NSF Standard Grant in Geometric Analysis and Topology, DMS-2104411 NSF Standard Grant in Geometric Analysis and Topology, DMS-1840723 NSF Mathematical Sciences Research Postdoctoral Fellowship, DMS-1303903	
HONORS & AWARDS	Institute for Advanced Study Summer Collaborators Program 2024 2022 AWM Award for Scientific Excellence, Rice University AWM Student Chapter Rice Race and Anti-Racism Research Grant, co-PI w/ D. King (PI) & M. Hebl (co-PI), 2020 Brasil@Rice Collaborative Travel Grant, 2019 Mary Ellen Rudin Research Prize, University of Wisconsin - Madison, 2013 European Science Foundation - Short Travel Grant CAST, 2012 Honored Instructor Award, University of Wisconsin - Madison Housing, 2011 Celebrating Women in Mathematics Grant, University of Wisconsin (P.I. 2009-2010) Student Ambassador Fellowship from the Technische Universität Berlin, 2006-2007 University of Illinois International Scholar (Fellowship), 2006-2007 University of Illinois List of Teachers Rated Excellent, Fall 2005 The Honors Teaching Assistantship for Undergraduates, University of Illinois, 2005	

- ★ (with M. Hutchings) Embedded contact homology of Seifert fiber spaces, in progress, 27 pages.
- ★ (with M. Hutchings) S^1 -equivariant contact homology for dynamically convex contact forms, in preparation, 85 pages.
- ★ (with A. Marinković, A. Rechtman, L. Starkston, S. Tanny, L. Wang) Contact structures induced concavely on the boundaries of star shaped plumbings, in preparation, 10 pages.
- 14. (with A. Marinković, A. Rechtman, L. Starkston, S. Tanny, L. Wang) Properties of contact toric structures and concave boundaries of linear plumbings, [arXiv:2501.08451](#), submitted 1/21/25 to Transactions of the AMS, 66 pages. z
- 13. (with L. Digiosia) A contact McKay correspondence for links of simple singularities, Submitted 12/19/2022 and Accepted 10/9/2025 to Alg. Geom. Topol., 63 pages.
- 12. (with M. Weiler) Torus knotted Reeb dynamics and the Calabi invariant, *Advances in Mathematics*, Volume 470, June 2025, 110236, 99 pages.
- 11 + ϵ . Torus knotted Reeb dynamics in the tight contact 3-sphere (joint work with M. Weiler), Oberwolfach Reports (2023), No. 30/2023 DOI: [10.4171/OWR/2023/30](#), 3 pages.
- 11. (with M. Weiler) Torus knot filtered embedded contact homology of the tight contact 3-sphere, *J. Topology*, 2024, (7) Issue 2, 74 pages.
- 10. (with M. Weiler) Embedded contact homology of prequantization bundles, [arXiv:2007.13883](#), *J. Symp. Geom.* vol 21, issue 6, 2023, 1077-1189, 113 pages.
- 9. (with L. Digiosia, H. Ning, M. Weiler, Y. Yang)* Symplectic embeddings of four-dimensional polydisks into ellipsoids, *J. Fix. Pt. Thry. Appl.* 24, 69 (2022), 38 pages.
- 8. (with M. Hutchings) S^1 -equivariant cylindrical contact homology for hypertight contact forms, *J. Topology*, 2022, (15) 1455–1539, 84 pages.
- 7. (with M. Hutchings) Axiomatic S^1 Morse-Bott theory, *Alg. Geom. Topol.* 20 (2020) 1641–1690, 49 pages.
- 6. Automatic transversality for contact homology II: filtrations and computations, *Proc. Lon. Math. Soc.* Vol. 120, 6 (2020), 853–917, 64 pages.
- 5. (with K. Christianson)* Symplectic embeddings of 4-dimensional polydisks into balls, *Alg. Geom. Topol.* 18 (2018) 2151–2178, 27 pages.
- 4. (with L. Abbrescia, I. Huq-Kuruvilla, & N. Sultani)* Reeb dynamics of the link of the A_n singularity, *Involve* Vol. 10 (2017), No. 3, 417–442, 25 pages.
- 3. (with M. Hutchings) Cylindrical contact homology for dynamically convex contact forms in three dimensions, *J. Symp. Geom.* 14 (2016), No. 4, 983–1012, 29 pages.
- 2. From Dynamics to Contact and Symplectic Topology and Back, *The Institute for Advanced Study Newsletter*, Summer 2016.
- 1. Automatic transversality for contact homology I: regularity, *Abh. Math. Semin. Univ. Hambg.* 85 (2015), no. 2, 125-179, 54 pages.

* denotes a paper written with undergraduate research mentees.

ACADEMIC VISITS

✳ COVID-19 CANCELLATION

Centre International de Rencontres Mathématiques, France	July 2-8, 2023
RWTH Aachen University, Germany	December 11 - 17, 2022
Simons Lauter Mathematical Sciences Institute (MSRI)	4 weeks in Fall 2023
Institute for Advanced Study, Princeton	November 8 - 18, 2021
✳ Institut de Mathématiques de Jussieu-Paris Rive Gauche, France	September 2020
✳ RWTH Aachen University, Germany	April 27 - May 1, 2020
✳ Institute for Advanced Study, Princeton	March 26 - April 3, 2020
University of California at Berkeley	March 3-6, 2020
University of California at Berkeley	January 5-11, 2020
Instituto de Matemática Pura e Aplicada, Rio de Janeiro	August 4-31, 2019
Humboldt Universität Berlin, Germany	June 7-17, 2019
Institute for Advanced Study, Princeton	March 10-24, 2019
University of California at Berkeley	January 8-13, 2019
Humboldt Universität Berlin, Germany	May 14-24, 2018
Universität Augsburg, Germany	May 23-28, 2017
Humboldt Universität Berlin, Germany	May 16-22, 2017
Institute for Advanced Study, Princeton	February 28 - March 3, 2017
Humboldt Universität Berlin, Germany	January 18-24, 2017
Ruhr-Universität Bochum, Germany	January 12-17, 2017
IRMA, Université de Strasbourg, France	July 30 - August 3, 2016
University of California at Berkeley	November 9-13, 2015
Institut des Hautes Études Scientifiques, France	July 5-18, 2015
University of California at Berkeley	May 6-13, 2015
University of California at Berkeley	December 1-5, 2014
University of California at Berkeley	October 6-10, 2014
Université Pierre et Marie Curie, France	September 6-13, 2014
University of California at Berkeley	December 2-6, 2013
Institute for Advanced Study, Princeton	July 1 - August 31, 2013
Institute for Advanced Study, Princeton	January 17-18, 2013
Ludwig-Maximilians-Universität München, Germany	June 28 - July 6, 2012
Institute for Advanced Study, Princeton	May 14 - June 7, 2012
Simons Center for Geometry and Physics, Stony Brook	April 7-8, 2011
Korean National Institute for Mathematical Sciences, Seoul	Fall 2009

INVITED LECTURES

✳ COVID-19 CANCELLATION

Lecture series

- Philadelphia Area Topology PATCH Seminar, Bryn Mawr, Spring 2023 (2 lectures)
- School on Symplectic Topology, IMPA, Brazil, August 2019 (2 lectures)
- Northwestern University Geometry and Physics Seminar, Chicago, Fall 2017 (2 lectures)
- ANR Contact Spectral Invariants Workshop, Houat, France, Summer 2017 (3 lectures)
- Humboldt Universität Berlin, Oberseminar Geometrie, Summer 2016 (2 lectures)
- University of Texas at Austin Geometry Seminar, Spring 2015 (3 lectures)
- Simons Center Symplectic Seminar, Stony Brook, Spring 2014 (2 lectures)
- Northeastern University, Boston, Fall 2013 (3 lectures)
- Columbia University, New York, Fall 2013 (2 lectures)
- Philadelphia Area Contact Topology Seminar (PACT), Bryn Mawr, Fall 2013 (4 lectures)

Conference talks

- Georgia Tech Topology Conference (December 2023)
- Symplectic Field Theory 10, Humboldt Universität Berlin (August 2023)
- Princeton Holomorphic methods in low dimensional topology conference (July 2023)
- Oberwolfach Dynamische Systeme Workshop (July 2023)

Annual Conference on Geometric Analysis at Rutgers University (May 2023)
 Symplectic and Contact Topology Early Career Workshop Mentor (August 2022)
 South Central Topology Conference, Texas A&M (September 2021)
 Advances in Symplectic Topology, Institut Henri Poincaré (May 2021)
 Annual Conference on Geometric Analysis “at” Rutgers University (May 2021)
 Brazil (Virtual) Mini-Workshop on Symplectic Geometry V (November 2020)
 Annual Conference on Geometric Analysis at Rutgers University (May 2020)
 IPAM-UCLA Geometry and Topology Workshop (January 2020)
 Conference on Symplectic Topology, IMPA, Brazil (August 2019)
 Midwest Topology Seminar, Michigan State University (May 2019)
 Texas Topology and Geometry Conference, TCU, Fort Worth, TX (February 2019)
 Modern Math Workshop, Research Session & IAS/PCMI representative (October 2018)
 AMS Southeastern Sectional Meeting, University of Arkansas (November 2018)
 Geometric structures on 3 and 4 Manifolds in Dubrovnik (June 2018)
 Symplectic Dynamics Workshop, Seoul National University (February 2018)
 Oberwolfach Dynamische Systeme Workshop, Germany (July 2017)
 MAA Mathfest, Symplectic Topology Invited Session (August 2017)
 AMS Northeastern Sectional Meeting, Hunter College (Spring 2017)
 Workshop on Topology: Identifying Order in Complex Systems, Rutgers (Spring 2017)
 AMS Southeastern Sectional Meeting, North Carolina State (Fall 2016)
 Symplectic Field Theory VIII, Humboldt Universität Berlin (August 2016)
 Symplectic geometry and topology conference for Dusa McDuff, ICMS (July 2016)
 IHÉS Summer School on Moduli Problems in Symplectic Geometry (July 2015)
 Georgia Topology Conference (May 2015)
 Gökova Geometry and Topology Conference (May 2015)
 Gökova Geometry and Topology Conference, evening expository talks (May 2015)
 AWM Research Symposium, University of Maryland, College Park (Spring 2015)
 AMS Eastern Sectional Meeting, Georgetown University (Spring 2015)
 13th Graduate Topology & Geometry Conference, Young Faculty speaker (Spring 2015)
 JMM, AMS Special Session on Geometries Defined by Differential Forms (January 2015)
 American Institute for Mathematics Workshop on Contact Homology (December 2014)
 JMM, AMS Special Session on Symplectic and Contact Manifolds (January 2014)
 Simons Center, Graduate Workshop on Symplectic and Contact Topology (Fall 2012)
 Polyfolds MIT-RTG workshop, Pajaro Dunes Resort, California (Summer 2012)
 Université de Nantes, Symplectic and Contact Topology Summer School (Summer 2011)
 AMS Eastern Sectional Meeting, Cornell (Fall 2011)

Colloquia

IAS Members Colloquium, Spring 2023
 Washington University, Fall 2022
 University of Toledo, Ohio, Fall 2021
 University of Louisiana - Lafayette, Fall 2019
 University of Wisconsin - Madison, April 2019
 IAS Mathematical Conversations, March 2019
 University of Melbourne, February 2018
 Northeastern University, January 2018
 Rice University, January 2018
 Notre Dame, January 2018
 Duke, December 2016

International Seminars

Bochum-Aachen-Cologne-Heidelberg Symplectic Seminar, Germany (Fall 2022)
✚ Joint Analysis Seminar, RWTH Aachen University, Germany (Spring 2020)
Instituto Superior Técnico Lisboa, Geometria Seminar (Summer 2019)
Berlin-Hamburg Seminar zur symplektischen Geometrie (Summer 2019)
Humboldt Universität Berlin, Seminar zur symplektischen Geometrie (Spring 2018)
Universität Augsburg, Oberseminar symplektische geometrie (Spring 2017)
Berlin-Hamburg Seminar zur symplektischen Geometrie (Spring 2017)
Ruhr-Universität Bochum, Oberseminar Dynamical Systems (Spring 2017)
Paris Symplectix Seminar, Jussieu (Fall 2014)
Ludwig-Maximilians-Universität München, Geometry Seminar (Summer 2012)
Korean Institute for Advanced Study, Geometry Seminar (Fall 2009)

Domestic Seminars

IAS Symplectic Geometry Seminar (Fall 2024)
MIT Symplectic Seminar (Spring 2023)
Princeton University and IAS Symplectic Seminar (Spring 2023)
Princeton University Algebraic Topology Seminar (Spring 2023)
Princeton University and IAS Symplectic Seminar (Fall 2021)
Contact and Symplectic Geometry Seminar, UC Berkeley (Fall 2021)
✚ Columbia University, Symplectic Geometry Seminar (Fall 2021)
IAS Math Conversations @ Home (March 2021)
Rice Undergraduate Colloquium (October 2020)
Western Hemisphere Virtual Symplectic Seminar, Columbia-SCGP-USC (May 2020)
Symplectic Zoominar, Montreal-Princeton/IAS-Tel Aviv-Paris (May 2020)
✚ IAS Symplectic Dynamics and Geometry Seminar (Spring 2020)
✚ Columbia University, Symplectic Geometry Seminar (Spring 2020)
Northern California Symplectic Geometry Seminar, Stanford University (Spring 2020)
Rice University, Undergraduate Colloquium (January 2020)
IAS Symplectic Dynamics and Geometry Seminar (Spring 2019)
UC Davis, Topology Seminar (Spring 2019)
University of Virginia, Topology Seminar (Fall 2018)
Rutgers, Geometry and Topology Seminar (Spring 2018)
Northern California Symplectic Geometry Seminar, Stanford University (Fall 2017)
Joint Georgia Tech and UGA Geometry and Topology Seminar (Spring 2017)
University of Pennsylvania, Deformation Theory Seminar (Spring 2017)
MIT, Topology and Geometry Seminar (Fall 2016)
Rutgers, Geometry and Topology Seminar (Fall 2016)
Triangle Topology Seminar, joint between Duke, UNC, and NC State (Fall 2016)
Duke, Graduate/Faculty Seminar (Fall 2016)
Harvard, Gauge Theory and Symplectic Topology Seminar (Spring 2016)
UC Davis, Geometry Seminar (Fall 2015)
UC Davis, Student-Run Geometry/Topology Seminar (Fall 2015)
University of Virginia, Topology Seminar (Fall 2015)
IAS, Postdoc Talks (Fall 2015)
Columbia University, Reading group on contact and symplectic topology (Fall 2015)
Barnard College, Columbia University, Perspectives in Mathematics (Fall 2015)
Notre Dame, Geometry and Topology Seminar (Spring 2015)
Bronx Community College, Research Seminar (Spring 2015)
UIUC Symplectic Geometry Seminar (Spring 2015)
Northern California Symplectic Geometry Seminar, UC Berkeley (Fall 2014)

MIT, Topology and Geometry Seminar (Fall 2014)
 Columbia Undergraduate Math Seminar (Fall 2014)
 Harvard, Gauge Theory and Symplectic Topology seminar (Fall 2014)
 IAS, Postdoc Talks (Fall 2014)
 University of Rochester, New York, Geometry Seminar (Spring 2014)
 Princeton University and IAS Symplectic Seminar (Spring 2014)
 IAS, Postdoc Talks (Fall 2013)
 MIT, Symplectic Geometry Seminar (Spring 2013)
 University of Wisconsin - Madison, Geometry and Topology Seminar (Fall 2012)
 University of Texas at Austin, Geometry Seminar (Fall 2012)
 Columbia University, Symplectic Geometry Seminar (Spring 2012)
 MIT, Topology and Geometry Seminar (Spring 2011)
 University of Wisconsin Richland Center (Spring 2011)

TEACHING

Rice University

Math 699: Graduate Seminar (The Seiberg-Witten Equations)	Spring 2022
Math 699: Graduate Seminar (Towards the Seiberg-Witten Equations)	Fall 2021
Math 683: Geometry Seminar (Thurston Theory)	Fall 2022
Math 451/551: Differentiable Manifolds	Fall 2022 & Spring 2025
Math 541: Topics in Topology	Spring 2022
Math 479: Math Undergraduate Research	Spring 2023 & Fall 2025
Math 444/539: Geometric Topology	Fall 2018 & Fall 2019
Math 402/500: Differential Geometry	Spring 2021
Math 401: Curves and Surfaces	Spring 2022 & Fall 2019 & Fall 2024
Math 354: Honors Linear Algebra	Spring 2023
Math 222: Honors Calculus IV	Spring 2021
Math 212: Multivariable Calculus	Fall 2018

Columbia University

Math 4081: Introduction to Differentiable Manifolds	Spring 2018
Math 1201: Calculus III	Fall 2016 & 2017

ACADEMIC ADVISING

Supervision of PhD Theses

Subsequent position

Leo Digiosia	Rice University (8/2022)	US Bank, Quantitative Model Analyst
--------------	--------------------------	-------------------------------------

Supervision of Postdoctoral Researchers

Subsequent position

Dr. Morgan Weiler	Rice University (2019-21)	NSF MSPRF (Cornell)
-------------------	---------------------------	---------------------

Supervision of Distinction in Research and Creative Works

Subsequent PhD candidacy

Haoming Ning	Rice University (2020)	University of Washington
Yirong Yang	Rice University (2020)	University of Washington

Supervision of Undergraduate Senior Honors Theses

Subsequent PhD candidacy

Theodore Coyne	Columbia University (2018)	UC Berkeley
Sara Edelman-Muñoz	Barnard College (2018)	Rice, NSF GRF Honorable Mention

Ph.D. Thesis Committee Member

Saraswathi Venkatesh (advisor: M. Abouzaid), Columbia University	March 2018
--	------------

Rice Undergrad Research funded on my NSF DMS-2104411

Subsequent PhD candidacy

Evan Huang	Spring 2023	Princeton University
Caden Farley	Spring 2023	University of Tennessee Knoxville

• Research, review, and referee work for *The Floer Jungle* by H. Hofer and S. Roberts

Caden Farley Summer 2022
 • Preprint: (C. Farley, T. Holm, N. Magill, J. Schroder, M. Weiler, Z. Wang, E. Zabelina)
Four-periodic infinite staircases for four-dimensional polydisks, arXiv:2210.15069

Rice Undergraduate Research funded on my NSF DMS-1840723

Haoming Ning Summer 2020 & Fall 2020 Math B.S. 12/2020
 Yirong Yang Summer 2020 & Fall 2020 Math B.S. 12/2020

• Publication: (L. Digiosia, J. Nelson, H. Ning, M. Weiler, Y. Yang)
Symplectic embeddings of four-dimensional polydisks into ellipsoids, JFPTA (2022), 38 pg.

Summer Integrated Research Experience at Rice University

Obstructing Relative Trisection Destabilizations, 2025 Subsequent PhD candidacy

Dr. Nickolas Castro Postdoctoral Mentor
 Teddy Astor Undergraduate
 Alejandro Lopez Undergraduate
 Drake McAdams Undergraduate

Remote Summer Integrated Research Experience at Rice University

Virtual BeECH (Beyond ECH Capacities), 2020 Subsequent PhD candidacy

Leo DiGiosia Grad student
 Haoming Ning Undergraduate University of Washington
 Yirong Yang Undergraduate University of Washington

Summer Research Experience for Undergraduates at Columbia University

Arithmetic Invariants of Knots, 2018 Subsequent PhD candidacy/position

Teresa Brown Columbia University
 Quang Dao Columbia University University of Michigan
 Mariya Delyakova Columbia University Nomura Repurchase Agreement Trader
 Lucas Furtado Columbia University
 Myeonhu Kim Columbia University Princeton University
 Evan Wickenden Columbia University UC Boulder Physics (theory)

Symplectic Packings and Embeddings, 2017 Subsequent PhD candidacy

Theodore Coyne Columbia University UC Berkeley
 Sara Edelman-Muñoz Barnard College Rice, NSF GRF Honorable Mention
 Greyson Potter Columbia University Boston University
 Chunying Hungdai Barnard College

Obstructions of Symplectic Embeddings, 2016 Subsequent PhD candidacy

Kat Christianson Columbia University NSF GRF UC Berkeley
 Irit Huq-Kuruvilla Columbia University NSF GRF UC Berkeley
 Greyson Potter Columbia University Boston University
 Rox Sayde Barnard College Northwestern University
 Elizabeth Yoo Columbia University Princeton, NSF GRF Honorable Mention

Obstructions of Symplectic Embeddings, 2015 Subsequent PhD candidacy

Kat Christianson Columbia University NSF GRF UC Berkeley
 Irit Huq-Kuruvilla Columbia University NSF GRF UC Berkeley
 Nawaz Sultani Columbia University University of Michigan

Reeb dynamics of A_n -singularities, 2014 Subsequent PhD candidacy

Leonardo Abbrescia Columbia University NSF GRF Michigan State
 Irit Huq-Kuruvilla Columbia University NSF GRF UC Berkeley
 Nawaz Sultani Columbia University University of Michigan

OUTREACH &
MENTORING

Association for Women in Mathematics Chapter at Rice University	2018-
Faculty sponsor 2023 - present and Faculty advisor 2018-present. In 2020-21, I organized a joint Colloquium given by A. Glazer, who presented her work, the National Mathematics Survey, discussing the difficulties and barriers that women in math face. Following such discussion, I secured funding for and helped start weekly "Math Nights," where students meet and study together in a supportive community, beginning in Fall 2021. I also helped the chapter organize and advertise many professional development events, including panels on REUs and proof-writing techniques.	
Rice Math Club , Rice University Student Club	2021-22
Faculty sponsor.	
Mathematical Perspectives for Prospective Majors , Rice University	2018-2021
Organized events to advertise the mathematics major and minor.	
Freshman Math Mentorship Program , with the Rice AWM Chapter	2020-21
Faculty advisor and organizer.	
Horizons in Mathematics , Rice University	2018-20
Founded a colloquium series with Dr. Allison Miller to bring outstanding mathematicians from traditionally under-represented backgrounds to Rice University. https://sites.google.com/view/anmiller/horizons	
Math Alliance Mentor , Facilitated Graduate Applications Process (F-GAP)	2016-2018
AWM Chapter at Barnard College and Columbia University	2016-2018
Faculty advisor and mentoring program coordinator	
Institute for Advanced Study, Women and Mathematics Program	Spring 2016
Organized a panel discussion highlighting various careers in mathematics.	
Institute for Advanced Study, Women and Mathematics Program	Spring 2015
Organized the career panel discussion and research seminar talks.	
Math Night, Robert E. Willett Elementary School , Volunteer	Spring 2015
Julia Robinson Math Festival, Princeton University , Co-Organizer	Spring 2015
Sonya Kovalevsky Day, Barnard College	November 21, 2014
Organized and led the one-hour workshop, "Baller geometry: when the shortest path isn't a straight line" for thirty 10th grade female students from the Urban Assembly Schools.	
Upper Freehold Regional School District, New Jersey	October 28, 2014
Keynote speaker for Allentown High Math and Science Honor Society Induction.	
Julia Robinson Math Festival, Princeton University , Co-Organizer	Spring 2014
The Urban Assembly School for Wildlife Conservation, the Bronx	Fall 2013
Discussed careers in mathematics with small groups of 8-12th graders, developed classroom activities with the 9-12th grade math teachers, and volunteered as a teacher's aide.	
Upper Freehold Regional School District, New Jersey	November 21, 2013
Keynote speaker for Allentown High School World Language Honor Society Induction ceremony: "How language enriches your life and career."	
Institute for Advanced Study, Women and Mathematics Program	Spring 2012
Teaching assistant for the mini-course, From Linear Algebra to the Non-Squeezing Theorem of Symplectic Geometry as part of the program, 21 st Century Geometry.	

Camp Euclid Summer 2012
Mentored an online 8-week mathematics research program for middle and high schoolers.

Girl Scout Math Whiz Badge Session May 2010

PROFESSIONAL
ACTIVITIES

★ COVID-19 CANCELLATION

Virtual International Learning Seminar
Obstruction Bundle Zooming, with J. Rooney (Simons Center) Fall 2020

Conferences, Workshops, and Summer Schools Organized

Banff Women in Geometry 3 September 24-29, 2023
Banff International Research Station, Symplectic Team Co-Lead with L. Starkston

Workshop on Symplectic Field Theory X, August 26-September 1, 2023
Humboldt Universität Berlin, with K. Mohnke, T. Walpuski, and C. Wendl

✱ *Dubrovnik 2020: Holomorphic curves and low dimensional topology* June 22-26, 2020
Inter-University Center, Croatia with T. Mark, G. Matic, A. Wand, and C. Wendl

New advances in symplectic and contact topology, with M. Weiler April 8-9, 2019
AWM Research Symposium Special Session, Rice University

Facets of Symplectic Topology, with T. Holm and J. Weitsman April 21-22, 2018
AMS Eastern Meeting Special Session, Northeastern University

Augmentations and Legendrians at the IAS February 11-12, 2016

Moduli Problems in Symplectic Geometry, IHÉS Summer School July 6-17, 2015
Chair of organizational committee, with D. Cristofaro-Gardiner and J.W. Fish.

Transversality in Contact Homology December 8-12, 2014
AIM Research Workshop, with J.W. Fish, M. Hutchings, and K. Wehrheim

Seventh Annual Graduate Student Topology and Geometry Conference April 18-19, 2009
University of Wisconsin - Madison, with N. Addington, T.-S. Lien, M. Childers

Past seminar organization

Symplectic Geometry and Gauge Theory Seminar, Columbia University 2017-18
Joint Columbia and IAS symplectic seminar 2014-2016
Joint Princeton and IAS symplectic seminar 2014-2016
Working seminar in contact and symplectic topology, Simons Center Spring 2014
Foundations of contact homology working seminar, Columbia University Fall 2013
Symplectic Geometry and Gauge Theory Seminar, Columbia University Fall 2013
Women in Mathematics at Wisconsin, UW Madison 2009-2013

Information of Potential Interest

Member: American Mathematical Society, Association for Women in Mathematics, National Association of Mathematicians
Languages: English (native), deutsch (nicht schlecht), français (un peu)

SERVICE

Trustee: Association of Members of the Institute for Advanced Study (AMIAS) 2019-2022

Grant Evaluator: German-Israeli Foundation for Scientific Research and Development

Referee: Annals of Mathematics, Advances in Mathematics, Algebraic & Geometric Topology, Inventiones Mathematicae, IMRN, J. Differential Geometry, J. Fixed Point Thry. Appl.,

J. Topology, MathSciNet, AMS Graduate Studies in Mathematics

Panelist: National Science Foundation

Service to the Rice University Mathematics Department

2023-2024	Chair, Instructor Hiring
Fall 2022	Career Seminar
2021-2022	Support to the Diversity Committee
2019-2022	Department Artwork
2018-2022	Graduate Student Admissions Committee
1/19-12/20	Chair, Diversity and Support Committee
2018-2020	Topology Qualifying Exam
2018-	Advisory Committee to Appointments Committee
2018-2019	Chair, Colloquium Committee
2018-2019	Instructor Hiring
2018-2019	Topology Seminar