

EDUCATION	University of California, Santa Barbara Ph.D. in Mathematics (pursuing)	Fall 2019 - Spring 2025 (expected)
	University of Oklahoma M.A. in Mathematics	Fall 2014 - Spring 2017
	University of California, Davis B.S. in Mathematics	Fall 2010 - Spring 2014
PAPERS	3. <i>"Skein Theory of Affine ADE Subfactor Planar Algebras"</i> (thesis, in preparation)	
	2. <i>"Skein Theory of Affine A Subfactor Planar Algebras"</i> (in preparation)	
	1. <i>"A Determinant Formula of the Jones Polynomial for a Family of Braids"</i> with D. Asaner, S. Kumar, A. Pease, and A. Poudel (preprint available upon request)	
RESEARCH INTERESTS	Quantum algebra, low-dimensional topology, operator algebras, tensor categories, diagrammatic algebras, subfactors, knot theory, quantum groups, structure and classification of C^* -algebras, quantum topology, representation theory	
CURRENT RESEARCH PROJECTS	· <i>"Nuclear Dimension of Crossed Products by Hilbert Bimodules over Commutative C^*-algebras"</i> , with M. Forough, Z. Hassanpour-Yakhdani, J.A. Jeong, P. Luthra, and K. Strung	
	· <i>"A Skein Theory for Nichols Hopf Algebras"</i> , with A. Bisnath, and Q. Kolt	
AWARDS	National Science Foundation Travel Grant (\$2300)	2024
	National Science Foundation Travel Grant (\$1000)	2024
	GSA Conference Travel Grant, UC Santa Barbara (\$500)	2024
	USTARS Distinguished Graduate Student Speaker in Topology (\$200)	2024
	National Science Foundation Travel Grant (\$1350)	2023
	Operator Algebra Mentor Network Grant (\$500)	2023
	Decolvenaere Research Accelerator Award, UCSB Graduate Division (\$8000)	2023
	Individualized Professional Skills (IPS) Grant, UC Santa Barbara (\$1000)	2023
	Math Department Graduate Fellowship, University of Oklahoma (\$3000)	2015
	Richard V. Andree Memorial Scholarship, University of Oklahoma (\$2000)	2015
	Yueh-Jing Lin Fund, UC Davis (\$2500)	2013
TALKS *=INVITED	*20. AMS Western Sectional Meeting ; Graphical Calculus in Representation Theory and Low-Dimensional Topology Special Session; University of California, Riverside; Riverside, California <i>TBD</i>	October 2024
	19. Young Mathematicians in C^ Algebras ; University of Glasgow; Glasgow, Scotland <i>"Using Diagrams to Describe Quantum Symmetries of Subfactors"</i>	August 2024
	18. Oberwolfach Seminar ; Classification of C^ -Algebras and Dynamics Seminar; Oberwolfach Research Institute for Mathematics; Oberwolfach, Germany <i>"Nuclear Dimension of Cuntz-Pimsner Algebras of C^*-Correspondences"</i>	May 2024
	17. Banff International Research Station Workshop ; Skew Braces, Braids, and the Yang-Baxter Equation; Banff International Research Station; Banff, Canada <i>"Skein Theory of Subfactor Planar Algebras"</i>	May 2024

- *16. **USTARS Distinguished Graduate Student in Topology Speaker;** April 2024
Underrepresented Students in Topology and Algebra Research Symposium;
University of Iowa; Iowa City, Iowa
"Using Diagrams to Describe Quantum Symmetries of Subfactors"
- 15. **Graduate Student Topology and Geometry Conference;** Michigan State April 2024
University; East Lansing, Michigan
"Skein Theory for Index 4 Subfactor Planar Algebras"
- 14. **Southeastern Lie Theory Workshop;** Quantum Structures in Lie Theory; March 2024
University of Virginia; Charlottesville, Virginia
"Skein Theory for Index 4 Subfactor Planar Algebras"
- 13. **Women in Mathematics in Southern California Symposium;** Pomona February 2024
College; Claremont, California
"Using Diagrams to Describe Quantum Symmetries of Subfactors"
- *12. **Joint Mathematics Meetings;** Knots, Skein Modules, and Categorification January 2024
Special Session; Moscone Center; San Francisco, California
"Skein Theory for Index 4 Subfactor Planar Algebras"
- *11. **Claremont Topology Seminar;** Pomona College; Claremont, California November 2023
"Skein Theory for Affine ADE Subfactor Planar Algebras"
- *10. **Twinned Conference on C*-Algebras and Tensor Categories;** Fields Institute; in person in Toronto, Canada; and International Centre for Mathematical November 2023
Sciences; streamed live at Edinburgh, Scotland
"Skein Theory for Affine ADE Subfactor Planar Algebras"
- 9. **Young Mathematicians in C*-Algebras;** KU Leuven; Leuven, Belgium August 2023
"Skein Theory of Subfactor Planar Algebras"
- 8. **Great Plains Operator Theory Symposium;** The Ohio State University; May 2023
Columbus, Ohio
"Skein Theory for Index 4 Subfactor Planar Algebras"
- 7. **AMS Spring Western Sectional;** Algebraic Structures in Knot Theory Special May 2023
Session; Fresno State University; Fresno, California
"Diagrammatic Presentations of Affine Type A Subfactor Planar Algebras of Index 4"
- 6. **Moab Topology Conference;** Utah State University, Moab; Moab, Utah May 2023
"Skein Theory for Affine ADE Subfactor Planar Algebras"
- 5. **Redbud Topology Conference;** University of Oklahoma; Norman, Oklahoma March 2023
"Skein Theory of Affine Type A Subfactor Planar Algebras"
- 4. **Underrepresented Students in Topology and Algebra Symposium;** March 2023
University of Washington, Seattle, Washington
"Diagrammatic Presentations of Index 4 Planar Algebras"
- *3. **Quantum Groups Seminar;** On Zoom; Hosted by Université de Lille in Lille, March 2023
France & University of Oslo in Oslo, Norway
"Skein Theory for Affine ADE Subfactor Planar Algebras"
- 2. **Tech Topology Conference;** Georgia Institute of Technology; Atlanta, Georgia December 2022
"Diagrammatic Presentations of Index 4 Subfactor Planar Algebras"
- 1. **Topology Students Workshop;** Georgia Institute of Technology; Atlanta, July 2022
Georgia
"Diagrammatic Presentations of Affine Type A Subfactor Planar Algebras of Index 4"

POSTERS

- 2. **Graduate Student Topology and Geometry Conference;** Michigan State April 2024
University; East Lansing, Michigan
"A Determinant Formula of the Jones Polynomial for a Family of Braids"

1. **BRIDGES Conference**; University of Utah; Salt Lake City, Utah
"Diagrammatic Presentations of Affine Type A Subfactor Planar Algebras of Index 4"

June 2022

TEACHING

Lead TA - UC Santa Barbara

Provided professional development and training to new math department TAs

Fall 2022 - Spring 2023

Teaching Assistant - UC Santa Barbara

MATH 108AB - Introduction to Linear Algebra

MATH 8 - Transition to Higher Mathematics

MATH 6A - Vector Calculus I

MATH 6B - Vector Calculus II

MATH 34B - Calculus for Social and Life Sciences

Fall 2019 - present

Associate Instructor - UC Santa Barbara

MATH 6A - Vector Calculus I

MATH 4A - Linear Algebra with Applications

Summer 2020, 2021, 2024

Adjunct Mathematics Professor - Cosumnes River College

MATH 30 - Pre-Algebra

STAT 300 - Introduction to Statistics and Probability

MATH 20 - Arithmetic

Spring 2018 - Spring 2019

Teaching Assistant - University of Oklahoma

MATH 1743 - Business Calculus I

MATH 1914 - Calculus 1 (Fast Track)

MATH 2924 - Calculus 2 (Fast Track)

MATH 1823 - Calculus 1

Fall 2015 - Spring 2017

Instructor of Record - University of Oklahoma

MATH 1823 - Calculus 1

MATH 1503 - College Algebra

Fall 2014 - Summer 2015 & 2016

MENTORSHIP

UCSB Directed Reading Program Mentor

REU Graduate Mentor, UCSB

Women in STEM Mentor, UCSB

December 2019 - June 2023

June 2022 - August 2022

September 2019 - June 2022

SERVICE

UCSB Topology & Quantum Symmetry Seminar Co-Organizer

USTARS 2025 Conference Organizer Shadow

AWM Student Chapter at UCSB, Secretary

Directed Reading Program at UCSB Co-Organizer

Graduate Quantum Algebra and Topology Seminar Co-Organizer, UCSB

AWM Chapter at UCSB Founder and President

Quantum Algebra and Topology Seminar Co-Organizer, UCSB

July 2024 - present

May 2024 - present

June 2023 - present

December 2020 - July 2023

July 2023 - January 2024

August 2022 - June 2023

September 2021 - June 2022