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

**POSTERS** 

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

June 2022

Fall 2019 - present

Summer 2020, 2021, 2024

July 2023 - January 2024

August 2022 - June 2023

1. BRIDGES Conference; University of Utah; Salt Lake City, Utah

"Diagrammatic Presentations of Affine Type A Subfactor Planar Algebras of Index

**TEACHING** Lead TA - UC Santa Barbara

Fall 2022 - Spring 2023 Provided professional development and training to new math department TAs

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

Associate Instructor - UC Santa Barbara

MATH 6A - Vector Calculus I

MATH 4A - Linear Algebra with Applications

Adjunct Mathematics Professor - Cosumnes River College Spring 2018 - Spring 2019

MATH 30 - Pre-Algebra

STAT 300 - Introduction to Statistics and Probability

MATH 20 - Arithmetic

Teaching Assistant - University of Oklahoma Fall 2015 - Spring 2017

MATH 1743 - Business Calculus I MATH 1914 - Calculus 1 (Fast Track) MATH 2924 - Calculus 2 (Fast Track)

MATH 1823 - Calculus 1

Instructor of Record - University of Oklahoma Fall 2014 - Summer 2015 &

MATH 1823 - Calculus 1 2016

MATH 1503 - College Algebra

**MENTORSHIP UCSB Directed Reading Program Mentor** December 2019 - June 2023

> **REU Graduate Mentor, UCSB** June 2022 - August 2022 Women in STEM Mentor, UCSB September 2019 - June 2022

**SERVICE USTARS 2025 Conference Co-Organizer** May 2024 - present

AWM Student Chapter at UCSB, Secretary June 2023 - present Directed Reading Program at UCSB Co-Organizer December 2020 - July 2023

Graduate Quantum Algebra and Topology Seminar Co-Organizer, UCSB

AWM Chapter at UCSB Founder and President

Quantum Algebra and Topology Seminar Co-Organizer, UCSB September 2021 - June 2022