

# Melody A.H. Molander

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<b>CONTACT INFORMATION</b>		melodymolander[at]math.ucsb.edu melodymolander.com
<b>EDUCATION</b>	University of California, Santa Barbara <b>Ph.D. in Mathematics (pursuing)</b>	September 2019 - present
	University of Oklahoma <b>M.A. in Mathematics</b>	August 2014 - May 2017
	University of California, Davis <b>B.S. in Mathematics</b>	September 2010 - June 2014
<b>PAPER</b>	1. "Diagrammatic Presentations of Index 4 Subfactor Planar Algebras" (in preparation)	
<b>RESEARCH INTERESTS</b>	Subfactors, Planar Algebras, Quantum Groups, Quantum Algebra, Operator Algebras, Low-dimensional Topology, Category Theory, Knot Theory	
<b>AWARDS</b>	<b>Department of Mathematics Graduate Fellowship - University of Oklahoma</b> Awarded to graduate students who make exceptional contributions to the mathematics department	2015
	<b>Richard V. Andree Memorial Scholarship - University of Oklahoma</b> Awarded to graduate students who have shown academic excellence, department and university citizenship, and activity in support of Pi Mu Epsilon	2015
	<b>Yueh-Jing Lin Fund - UC Davis</b> Awarded to high-achieving graduate or undergraduate students.	2013
<b>SELECTED TALKS</b>	<i>Diagrammatic Presentations of Index 4 Subfactor Planar Algebras</i> Tech Topology Conference, Georgia Tech	December 2022
	<i>Diagrammatic Presentations of Affine Type A Subfactor Planar Algebras of Index 4</i> Topology Students Workshop, Georgia Tech	July 2022
	<i>Diagrammatic Presentations of Affine Type A Subfactor Planar Algebras of Index 4</i> BRIDGES Conference, Poster Session, University of Utah	June 2022
	<i>Comparing Voting Systems Using Kemeny Rankings</i> Undergraduate Research Conference, Student Poster Session - UC Davis	April 2014
	<i>Comparing Voting Systems Using Kemeny Rankings</i> MAA Golden Section Meeting, Student Poster Session - Sonoma State University	February 2014
<b>TEACHING EXPERIENCE</b>	<b>Teaching Assistant - UC Santa Barbara</b> 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
	<b>Associate Instructor - UC Santa Barbara</b> MATH 6A - Vector Calculus I MATH 4A - Linear Algebra with Applications	Summer 2020, Summer 2021

	<b>Adjunct Mathematics Professor - Cosumnes River College</b> MATH 30 - Pre-Algebra STAT 300 - Introduction to Statistics and Probability MATH 20 - Arithmetic	Spring 2018 - Spring 2019
	<b>Teaching Assistant - University of Oklahoma</b> 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
	<b>Instructor of Record - University of Oklahoma</b> MATH 1823 - Calculus 1 MATH 1503 - College Algebra	Fall 2014 - Summer 2015, Summer 2016
<b>TALKS FOR STUDENTS</b>	<i>Katherine Johnson: The Pioneer Whose Research Got Us to Outer Space!</i> Hypatian Seminar, UC Santa Barbara	November 2021
	<i>The Total Beginner's Guide to Creating Your Graduate Student Webpage</i> Hypatian Seminar, UC Santa Barbara	January 2021
	<i>Pascal's Triangle</i> AWM, UC Santa Barbara	February 2020
	<i>Ada Lovelace: Victorian Computer Programming Visionary</i> Hypatian Seminar - University of California, Santa Barbara	November 2019
	<i>My Career In Web Development (and Teaching!)</i> Mathematics Career Day - University of California, Davis	May 2018
	<i>Fractals and the World Around Us</i> (with Dr. Jeffrey Meyer) Math Day Fun Session - University of Oklahoma	November 2015
	<i>Barbers, Painters, and Berry: Famous Paradoxes and Their Relation to Mathematics</i> Math Club at UC Davis	October 2013
<b>WORK EXPERIENCE</b>	<b>Graduate Teaching Assistant</b> Mathematics Department, UC Santa Barbara	September 2019-present
	<b>Adjunct Faculty Professor</b> Cosumnes River College, Los Rios Community College District	January 2018 - August 2019
	<b>Internet Data Exchange Director</b> iHOUSEweb Inc.	July 2017 - August 2019
	<b>Lead Mathematics Academic Tutor</b> Kingsfield Tutors	July 2017 - February 2018
	<b>Graduate Teaching Assistant</b> Mathematics Department, University of Oklahoma	August 2014 - May 2017
	<b>Tutor</b> Math Center, Mathematics Department, University of Oklahoma	August 2014 - May 2017
	<b>Grader</b> Mathematics Department, University of California - Davis	August 2013 - June 2014
	<b>Tutor</b> Student Academic Success Center, University of California - Davis	August 2013 - June 2014

**ACADEMIC  
SERVICE**

<b>AWM Chapter at UCSB Founder and President</b>	August 2022 - present
<b>REU Graduate Mentor, UCSB</b>	June 2022 - present
<b>Directed Reading Program Co-Organizer and Mentor, UCSB</b>	Winter 2020 - present
<b>Women in STEM Mentor, UCSB</b>	September 2019 - present
<b>Quantum Algebra and Topology Seminar Co-Organizer, UCSB</b>	September 2021 - present
<b>Graduate Quantum Algebra and Topology Seminar Co-Organizer, UCSB</b>	September 2021 - present
<b>UC Santa Barbara Math Circle Aide</b>	September 2020 - September 2021
<b>Mathematics Career Day Panelist, UC Davis</b>	May 2018
<b>Mathematics Graduate Student Association Vice President, OU</b>	August 2016 - May 2017
<b>Math Day Fun Session Coordinator, OU</b>	November 2015, November 2016
<b>Volunteer - Women in STEM Conference by OK-EPSCOR</b>	October 2016
<b>Directed Reading Program Graduate Mentor, OU</b>	January 2016 - May 2016
<b>Math Teacher's Circle in OKC, Graduate Coordinator and Co-Founder</b>	August 2015 - May 2017
<b>TORAS Conference, Co-Organizer</b>	March 2015
<b>Undergraduate Mathematics Committee, Graduate Representative, OU</b>	August 2014 - May 2015
<b>Math Club Event Coordinator, UC Davis</b>	August 2013 - June 2014
<b>Undergraduate Volunteer, Davis Math Circle</b>	December 2012 - April 2013
<b>Coach, SF Bay Area/NorCal American Regions Mathematics League</b>	December 2012 - June 2014
<b>Math Club President, Math Club at UC Davis</b>	August 2012 - June 2013

**PROGRAMMING**

Excel, MATLAB, C, HTML, CSS, Python, SQL, and LaTeX