

EDUCATION	<p>Ph.D. Candidate in Mathematics University of California, Santa Barbara Expected 2018</p> <p>M.A. Mathematics University of California, Santa Barbara 2014</p> <p>B.A. Mathematics and Statistics with Honors Grinnell College 2012</p>
AWARDS	<p>National Physical Science Consortium Graduate Fellowship 2012 - 2018</p> <p>Outstanding Teaching Assistant UCSB Department of Mathematics 2017</p>
PAPERS	<p>"Potential Torsion in the Milnor Fiber of the Braid Arrangement" in preparation.</p> <p>"Boundary Braids and the Dual Braid Complex" (with J. McCammond and S. Witzel), in preparation.</p> <p>"The Complex Braid Arrangement and the Dual Braid Complex" (with J. McCammond), in preparation.</p> <p>"Undesired Parking Spaces and Contractible Pieces of the Noncrossing Partition Link" (with J. McCammond), <i>Electronic Journal of Combinatorics</i>, Vol 25, Issue 1. (2018)</p> <p>"A Decomposition of Parking Functions by Undesired Spaces" (with M. Bruce, M. Hlavacek, R. Kudo, and I. Nicolas), <i>Electronic Journal of Combinatorics</i>, Vol 23, Issue 3. (2016)</p> <p>"Hankel Transforms of Linear Combinations of Catalan Numbers" (with C. French, B. Saderholm, and W. Qian) <i>Journal of Integer Sequences</i>, Vol 14, Article 11.5.1. (2011)</p>
RESEARCH SUPERVISED	<p>UCSB Mathematics Summer Research Program Summer 2015</p> <p>Designed and supervised an REU project for four undergraduates.</p>
TEACHING	<p>Teaching Associate (Instructor of Record) University of California, Santa Barbara</p> <p>Linear Algebra with Applications Summer 2017</p> <p>Linear Algebra with Applications Summer 2016</p> <p>Teaching Assistant University of California, Santa Barbara</p> <p>Advanced Linear Algebra Fall 2017</p> <p>Linear Algebra with Applications Spring 2017</p> <p>Transition to Higher Mathematics Winter 2017</p> <p>Vector Calculus I Fall 2016</p> <p>Linear Algebra with Applications Spring 2016</p> <p>Calculus I Winter 2016</p> <p>Calculus II Winter 2016</p> <p>Advanced Linear Algebra Fall 2015</p> <p>Transition to Higher Mathematics Spring 2015</p> <p>Calculus for the Life and Social Sciences (Head TA) Winter 2015</p> <p>Transition to Higher Mathematics Fall 2014</p> <p>Advanced Linear Algebra Spring 2014</p> <p>Transition to Higher Mathematics Winter 2014</p> <p>Transition to Higher Mathematics Fall 2013</p>

TALKS GIVEN

Invited Talks

The Basics of Combinatorial Proof
Grinnell College Mathematics and Statistics Student Seminar | 2014

Conference Talks

Braids with Boundary-Parallel Strands
Tech Topology Conference | 2017

The Milnor Fiber of the Braid Arrangement
Tech Topology Conference | 2016

The Milnor Fiber of the Braid Arrangement
Topology Students Workshop | 2016

Seminar Talks

Catalan Numbers and the Braid Group
UCSB Discrete Geometry & Combinatorics Seminar | 2017

Braids, Configurations, and Noncrossing Partitions
UCSB Discrete Geometry & Combinatorics Seminar | 2016

The Combinatorics of Symmetric Group Representations
UCSB Discrete Geometry & Combinatorics Seminar | 2016

Noncrossing Partitions and Parking Functions with Undesired Spaces
UCSB Discrete Geometry & Combinatorics Seminar | 2016

Topology of Finite Posets
UCSB Discrete Geometry & Combinatorics Seminar | 2015

Noncrossing Partitions and the Milnor Fiber of the Braid Arrangement
UCSB Discrete Geometry & Combinatorics Seminar | 2015

Artin Groups, Hyperplane Arrangements, and Salvetti Complexes
UCSB Discrete Geometry & Combinatorics Seminar | 2015

Public Key Cryptography
UCSB SIAM Seminar on Top Algorithms in Computational Science | 2014

The Pudding is in the Proof: A Case for Combinatorial Solutions
UCSB Discrete Geometry & Combinatorics Seminar | 2014

Cryptography in the Braid Group
UCSB Discrete Geometry & Combinatorics Seminar | 2014

Hankel Transforms of Orthogonal Polynomials via Riordan Arrays
UCSB Discrete Geometry & Combinatorics Seminar | 2014

Difference Sets, Projective Geometry, and Symmetric Designs
UCSB Discrete Geometry & Combinatorics Seminar | 2013

Automatic Groups
UCSB Graduate Student Algebra Seminar | 2013

Catalan Numbers and the Hankel Transform
UCSB Graduate Student Topology Seminar | 2013

Topological Quantum Computing
UCSB Graduate Student Topology Seminar | 2012

	<p><i>Quantum Logic & Quantum Probability</i> Grinnell College Mathematics and Statistics Student Seminar 2012</p> <p><i>Classifying the Invert Transform as a Hankel Transform Preserving Sequence</i> Grinnell College Mathematics and Statistics Student Seminar 2010</p> <p><i>Catalan Numbers and the Hankel Transform</i> Iowa Summer Research Symposium (with W. Qian and B. Saderholm) 2010</p>
SERVICE	<p>Math Department Teaching Assistant Training UC Santa Barbara Lead TA 2016</p> <p>Scholarship for Transfers to Engage and Excel in Mathematics UC Santa Barbara Student Mentor 2016</p> <p>Discrete Geometry & Combinatorics Seminar UC Santa Barbara Organizer 2013 - present</p> <p>Campus-Wide TA Orientation UC Santa Barbara <i>Leading STEM Discussions in Mixed-Ability Classrooms</i> (organizer, speaker) 2016</p> <p>Hypatian Seminar UC Santa Barbara <i>Building an Academic Website</i> (organizer, speaker) 2017 <i>Building an Academic Website</i> (organizer, speaker) 2015 <i>Math Circle and Talking to Non-Mathematicians</i> (organizer, speaker) 2014 <i>Giving Talks in Math</i> (organizer, speaker) 2014 <i>What is Institutional Bias? An Open Discussion</i> (co-organizer) 2014 <i>CV Workshop</i> (organizer, speaker) 2013 <i>Finding Funding for Graduate Students</i> (organizer) 2013 <i>How to Pass Your Quals</i> (co-organizer) 2013 <i>CV Workshop</i> (organizer, speaker) 2012</p> <p>Math Circle UC Santa Barbara <i>Fibonacci Numbers and Catalan Numbers</i> 2015 <i>Experimenting with Mathematics</i> 2014 <i>Pascal's Triangle and Cellular Automata</i> 2013 <i>Fibonacci Numbers and Catalan Numbers</i> 2013</p> <p>Student Educational Policy Committee Grinnell College Organizing Member, Department of Mathematics 2010 - 2012</p>
CONFERENCES ATTENDED	<p>Tech Topology Conference Atlanta, GA 2017</p> <p>Algebraic and Geometric Combinatorics of Reflection Groups Montréal, QB 2017</p> <p>Young Geometric Group Theory VI Oxford, UK 2017</p> <p>Joint Mathematics Meetings Atlanta, GA 2017</p> <p>Tech Topology Conference Atlanta, GA 2016</p> <p>MSRI Workshop - Geometry of Mapping Class Groups and $\text{Out}(F_n)$ Berkeley, CA 2016</p> <p>Formal Power Series and Algebraic Combinatorics Vancouver, BC 2016</p> <p>Topology Students Workshop Atlanta, GA 2016</p> <p>AMS Spring Western Sectional Meeting Las Vegas, NV 2015</p> <p>The Thin Manifold - Graduate Workshop Iowa City, IA 2014</p> <p>Joint Mathematics Meetings Baltimore, MD 2014</p> <p>A Day of Triangulations Los Angeles, CA 2013</p> <p>Joint Mathematics Meetings San Diego, CA 2013</p> <p>Iowa Summer Research Symposium Ames, IA 2010</p>