

Elizabeth Wilcox

State University of New York at Oswego, Department of Mathematics
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EDUCATION

Ph.D. in Mathematics from **Binghamton University**, Binghamton, NY, May 2010. Dissertation Advisor: Ben Brewster, Title: Complete Finite Frobenius Groups and Wreath Products.

M.S. in Mathematics from the **University of Vermont**, Burlington, VT, May 2006. Dissertation Advisor: Richard Foote, Title: A New Approach to Suzuki's CA-Group Theorem.

B.A. in Mathematics with a (minor) in Biochemistry from **Carleton College**, Northfield, MN, June 2002. Undergraduate Advisor: Deanna Haunsperger.

PROFESSIONAL EXPERIENCE

2019 – present **Associate Professor**, Computer Science and Mathematics Departments, State University of New York at Oswego, NY

2013 – 2019 **Assistant Professor**, Mathematics Department, State University of New York at Oswego, NY

2010 – 2013 **Visiting Assistant Professor**, Mathematics Department, Colgate University, Hamilton, NY

2010 **Teaching Assistant**, Educational Opportunity Program, Binghamton, New York

2003 – present **Mathematics Consultant**

Experience includes: writing and editing math content, editing for grammar and organization, managing and analyzing large data sets, data presentation and statistical analysis, community outreach and awareness.

MATHEMATICAL PUBLICATIONS

Backus, Jonathan, Elizabeth Wilcox, and C. Taylor Yeracaris, "Enumeration of Paired Dice Differences Using Board Tilings," submitted July 2, 2019.

Martin, Julia and Elizabeth Wilcox, "Rules for Folding Polyominoes from One Level to Two," *Recreational Mathematics Magazine*, **4**(8): 47-58 (2017).

Wilcox, Elizabeth, "Exploring the Chermak-Delgado Lattice," *Mathematics Magazine*, **89**(1): 38 - 44 (2016).

An, Lijian, Joseph P. Brennan, Haipeng Qu, and Elizabeth Wilcox, "Chermak-Delgado Lattice Extension Theorems," *Communications in Algebra*, **43**(5): 2201-2213 (2015).

Brewster, Ben, Peter Hauck, and Elizabeth Wilcox, "Groups where the Chermak-Delgado Lattice is a Quasiantichain," *Archiv der Mathematik*, **103**(4): 301-311 (2014).

Callendar, Hannah L., James P. Solazzo, and Elizabeth Wilcox, "Undergraduate Research as a Capstone Requirement," Conference Proceedings of the 2012 Trends in Undergraduate Research in Mathematics Conference, *Involve - a Journal of Mathematics*, **7**(3): 273-279 (2014).

Brewster, Ben, Peter Hauck, and Elizabeth Wilcox, "Groups where the Chermak-Delgado Lattice is a Chain," *Journal of Group Theory*, **17(2)**:253-265 (2014).

Wilcox, Elizabeth, "Can a Pure Mathematician Really Dig Statistics?," *Math Horizons*, November 2013.

Brewster, Ben and Elizabeth Wilcox, "Some Groups with Computable Chermak-Delgado Lattices," *Bulletin of the Australian Mathematical Society*, **86**: 29 – 40 (2012).

Brewster, Ben and Elizabeth Wilcox, "Complete Finite Semidirect Products and Wreath Products," *Archiv der Mathematik (Basel)*, **96**: 301-309 (2011).

Wilcox, Elizabeth. "Complete Finite Wreath Products and Frobenius Groups." Doctoral Dissertation. Binghamton University, 2010.

Wilcox, Elizabeth. "New Approaches to Suzuki's CA-Group Theorem." Masters Dissertation. University of Vermont, 2006.

UNDERGRADUATE RESEARCH AND EXPOSITORY PROJECTS

Note that independent studies and capstone projects are only listed if a publication came from the work; research projects supported by grants and non-credit-bearing projects are listed even when no publication resulted.

Summer 2022	Navya Unkarsha Amaratunga
Summer 2021	Kayla Gray
Summer 2019	Ryan Gelnett -- "Abstract Representations of Polyominoes"
Summer 2018	Marquia Williams -- "Tiling Problems and Generating Functions" (Faculty-Student Challenge Grant)
Spring 2018	Jonathan Backus -- "Combinatorics of Dice Rolls"
Summer 2017	S. Mia Tomassetti -- "Symmetries in Music" (Faculty-Student Challenge Grant) Jonathan Backus -- "Don't Stop Mathematics (with Turo)" (Noyce Learning Grant)
Summer 2015	Julia Martin -- "Bats, Ecology, and Public Health" (Faculty-Student Challenge Grant)
Summer 2014	Julia Martin -- "Epidemiology of Rabies" (Faculty-Student Challenge Grant) Amy Hannahan -- "Programming the Chermak-Delgado Lattice" (Faculty-Student Challenge Grant)
Summer 2011	Victoria Jaskula -- "Hyperbolic Geometry" (Skidmore College Student) Daniel Michev -- "Fair Elections, Voting Systems, and Game Theory" (Colgate University, Research Project)
Spring 2009	Andrew Lillien -- "Classification of Hamiltonian Groups" (Binghamton University, Expository Project)

ADDITIONAL PUBLICATIONS

Wilcox, Elizabeth, Connor McGrath, Andrei V. Blokhin, Rick Gussio, and Ernest Hamel. "Evidence for a distinct ligand binding site on tubulin discovered through inhibition by GDP of paclitaxel-induced tubulin assembly in the absence of exogenous GTP." *Archives of Biochemistry and Biophysics* 484 (2009): 55-62.

DeMartino, Gabriella, Giuseppe La Regina, Antonio Coluccia, Michael C. Edler, Maria Chiara Barbera, Andrea Brancale, Elizabeth Wilcox, Ernest Hamel, Marino Artico, and Romano Silvestri. "Arylthioindoles, Potent Inhibitors of Tubulin Polymerization." *Journal of Medicinal Chemistry* (2004): 6120-6123.

Wilcox, Elizabeth, Andrei Blockhov, Debbie J. Lee, Ernest Hamel. “An apparent absolute requirement for GTP in paclitaxel-driven tubulin assembly.” Proceedings of the American Association of Cancer Research, 2003.

HONORS AND GRANTS

- State University of New York at Oswego Faculty-Student Challenge Grant
 - Summer 2022: Navya Amaratunga
 - Summer 2018: Marquia Williams
 - Summer 2017: S. Mia Tomassetti
 - Summer 2015: Julia Martin
 - Summer 2014: Julia Martin, Amy Hannahan
- Noyce Summer Learning Experience Grant (with Jonathan Backus), Summer 2017
- State University of New York at Oswego Scholarly and Creative Activity Grant, Summer 2014
- Association for Women in Mathematics Travel Grant, August 2013
- State University of New York Research Foundation Early Start Program Grant, Summer 2013
- Colgate University Faculty Research Council Grant, March 2012
- Binghamton University Dissertation Fellowship, Fall 2009
- Binghamton University Graduate Teaching Award, 2008
- University of Vermont John F. Kenney Graduate Award in Mathematics, 2006
- National Institutes of Health Cancer Research Training Award, 2002-2003.

SERVICE TO THE UNIVERSITY AND PROFESSION

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| Spring 2024 - Present | Program Chair, MAA Seaway Section
<i>Coordinate and develop the program of events for the biannual section meetings.</i> |
| 7/1/2020 - 6/30/2023 | MAA Committee on George Polya Awards
<i>Evaluate every article in the College Math Journal for potential as a George Polya award.</i> |
| 2/1/2020 - Present | Associate Editor, MAA Textbooks
<i>Read and evaluate potential textbooks for the MAA Textbooks series.</i> |
| 2021 - Present | At-Large Member, MAA Seaway Section Executive Committee |
| Spring 2016 - Present | Editor, The Seaway Current
<i>Editor and steward of the biannual newsletter of the Seaway Section of the MAA.</i> |
| 2018 - 2021 | Program Chair, MAA Seaway Section |
| 2012 - 2018 | Shadowing a Math Professor, Math Externship Program, Carleton College |
| • 2012: Sarah Milstein | • 2016: Patricia Commings and Anna Myer |
| • 2013: Elsa Cristafaro and Nimita Iyer | • 2017: Peter Sparks and Taylor Yeracaris |
| • 2014: David Lembersky and Junxiong Lu | • 2018: Freja Olsen |
| Fall 2014 - Spring 2018 | MAA Seaway Section Student Activities Committee
<i>Organize and create student activities for the biannual MAA Seaway Section conference.</i> |
| 2014 - 2020 | Zassenhaus Conference Organizing Committee
<i>Organize a yearly international research conference.</i> |
| 1/2014 - 12/2019 | MAA Membership Committee
<i>Meet 1-2 times yearly to envision, analyze, and evaluate membership options with the MAA.</i> |
| Fall 2014 - Present | SUNY Oswego Science Today Lecture Series
<i>Organize/co-organize the lecture series in the College of Liberal Arts and Sciences at SUNY Oswego, coordinating approximately 14 lectures each year.</i> |
| 2014 - 2015 | Co-organizer, “What’s New in Group Theory?” Special Session of the American Mathematical Society at the Joint Mathematics Meetings. |

For two years, I worked with Arturo Magidin (University of Louisiana at Lafayette) to organize 16 speakers for a special session at a national conference.

August 2015

MAA Community Players at the MAA MathFest

I played "Kate" in a production of Albert's Bridge, a play written by Tom Stoppard and directed by Steve Abbot (Middlebury College).

2009

Founding Chair, Binghamton University Graduate Conference in Algebra and Topology

GENERAL AUDIENCE PRESENTATIONS

January 2024	<i>AI Unveiled: A Brief Guide</i> , AAUW Presentation
October 2023	<i>The Power Set of a Set</i> , MAA Seaway Section Meeting, St. Bonaventure University
March 2022	<i>ECDHE: Let's shake on it!</i> , SUNY Oneonta Math, CS, & Stats Colloquium
September 2019	<i>Dice, subgraphs, partitions - oh, my!</i> , Math Department Seminar, SUNY Oswego
October 2017	<i>Quick Introduction to Elliptic Curve Cryptography</i> , MAA Seaway Section Meeting, SUNY Broome
January 2017	<i>Measuring Life</i> , Joint Math Meetings of the AMS/MAA, Atlanta, GA
October 2015	<i>The Group Menagerie</i> , Math Colloquium, SUNY Geneseo
August 2015	<i>A Group Theory Afternoon</i> , SMPosium at MAA MathFest
April 2015	<i>Ladder Games</i> , Pi Mu Epsilon Honor Society Induction Ceremony, Utica College
October 2014	<i>Al-Jabar: A Colorful Intro to Abstract Algebra</i> (Faculty Version), Department Seminar, Rochester Institute of Technology
July 2014	<i>Al-Jabar: A Colorful Intro to Abstract Algebra</i> (Student Version), SMPosium, Carleton College
April 2014	<i>Al-Jabar: A Colorful Intro to Abstract Algebra</i> (Faculty Version), MAA Seaway Section Meeting, Buffalo State College
March 2014	<i>Ladder Games</i> , Math Club, LeMoyne College
July 2013	<i>Dancing with Group Theorists</i> , SMPosium, Carleton College
April 2012	<i>I Fold: Origami as a Technique</i> , MAA Seaway Section Meeting, Hamilton College
April 2012	<i>Ladder Games</i> , Department Seminar, Mount Holyoke College
February 2012	<i>The Enormous Theorem</i> , Hamilton College
February 2012	<i>The Enormous Theorem</i> , State University of New York at Oneonta
February 2012	<i>The Enormous Theorem</i> , Southern Connecticut State University
October 2011	<i>The Enormous Theorem</i> , Math Colloquium SUNY Geneseo
October 2011	<i>Ladder Games</i> , MAA Seaway Section Meeting, St. Bonaventure University
April 2011	<i>Can parallel lines "meet"?</i> , Math Colloquium, Colgate University
April 2011	<i>Turning the Tables</i> , MAA Seaway Section Meeting, Nazareth College
October 2010	<i>The Ride, the Scrambler, Turned Me into a Group Theorist</i> , MAA Seaway Section, SUNY Plattsburgh

RESEARCH PRESENTATIONS

March 2022	<i>An Introduction to NTRUEncrypt and the Math Problem The Keeps It Secure</i> , University of Louisiana Lafayette Algebra Seminar
October 2019	<i>Generalizing the Chermak-Delgado Measure and Lattice of a Finite Group</i> , American Mathematical Society Eastern Section Meeting, Binghamton University, NY
May 2016	<i>Extending the Chermak-Delgado Lattice: A Progress Report</i> , Zassenhaus Group Theory Conference, Adelphi University, Adelphi, NY

May 2015	<i>Groups with a Quasi-Antichain Chermak-Delgado Lattice</i> , Zassenhaus Group Theory Conference, Binghamton University, Binghamton, NY
May 2014	<i>Chermak-Delgado Lattices in p-Groups</i> , Ohio State-Denison Mathematics Conference, Columbus, OH
August 2013	<i>Recent Developments in the Study of the Chermak-Delgado Lattice of a Finite Group</i> , Groups St. Andrews at St. Andrews, Scotland
June 2013	<i>Wreath Products</i> , Shanxi Normal University, Linfen, China
June 2013	<i>The Chermak-Delgado Lattice of a p-Group</i> , Shanxi Normal University, Linfen, China
January 2013	<i>The Chermak-Delgado Lattice of a Finite Group: An Update</i> , Joint Mathematics Meeting of the AMS and MAA, San Diego, CA
May 2012	<i>Computing the Chermak-Delgado Lattice of Wreath Products</i> , Ohio State-Denison Mathematics Conference, Columbus, OH
November 2011	<i>The Chermak-Delgado Lattice of Wreath Products</i> , Binghamton University Graduate Conference in Algebra and Topology, Binghamton, NY
October 2011	<i>Sizing Up Subgroups of Finite Groups</i> , Binghamton University Graduate Algebra Seminar, Binghamton, NY
August 2011	<i>The Chermak-Delgado Lattice of Products of Groups</i> , Creitz Group Theory Conference, Franklin and Marshall College, Lancaster, PA
May 2011	<i>The Automorphism Group of Certain Wreath Products</i> , Zassenhaus Group Theory Conference, Towson University, Towson, MD
January 2011	<i>The Base of a Wreath Product</i> , Joint Mathematics Meeting of the AMS and MAA, New Orleans LA
November 2010	<i>Unraveling Wreath Products</i> , Binghamton University Graduate Conference in Algebra and Topology, Binghamton, NY
May 2010	<i>Complete Semidirect Products</i> , Ohio State-Denison Mathematics Conference, Columbus, OH
March 2010	<i>When the Base of a Wreath Product is not Characteristic</i> , Classes of Finite Groups and Permutability Properties, University of Kentucky, Lexington, KY
January 2010	<i>Complete Groups</i> , Joint Mathematics Meeting of the AMS and MAA, San Francisco, CA
August 2009	<i>Complete Wreath Products</i> , Groups St. Andrews at Bath University, Bath, England
May 2009	<i>Complete Wreath Products</i> , Zassenhaus Group Theory Conference, Franklin and Marshall College, Lancaster, PA
March 2009	<i>Wreath Products and Automorphisms</i> , Syracuse University Mathematics Graduate Organization Conference, Syracuse, NY
May 2008	<i>S_n wr C_2 is complete for $n \neq 2, 3, 6$</i> , Ohio State-Denison Mathematics Conference, Columbus, OH
March 2008	<i>Complete Frobenius Groups</i> , Syracuse University Mathematics Graduate Conference, Syracuse, NY
Fall 2008	<i>An Introduction to Wreath Products</i> , Binghamton University Graduate Algebra Seminar, Binghamton, NY
Fall 2007	<i>The Automorphism Tower for a Finite Group of Trivial Center</i> , Binghamton University Graduate Algebra Seminar, Binghamton, NY
Spring 2007	<i>On a paper by B. Schumann</i> , Binghamton University Graduate Algebra Seminar, Binghamton, NY
Spring 2007	<i>A New Approach to Suzuki's CA-Group Theorem</i> , Binghamton University Undergraduate Algebra Seminar, Binghamton, NY
Fall 2006	<i>Subnormal Subgroups and Constructing Finite Solvable T-Groups</i> , Binghamton University Algebra Seminar, Binghamton, NY

May 2006 *A New Approach to Suzuki's CA-Group Theorem* (poster), University of Vermont Graduate
Student Research Day, Burlington, VT

ADDITIONAL WORKSHOPS AND CONFERENCES ATTENDED

This list does not include conferences that I attend regularly, such as the MAA Seaway Section meetings or the Joint Mathematics Meetings, or repeat listings of conferences and workshops where a presentation was given.

June 2019	Women and Mathematics Cryptography, AIS, Princeton, NJ
July 2015	POGIL PREP Workshop at University of South Florida, Tampa, FL
April 2014	Seaway NExT Workshop at Buffalo State College, Buffalo, NY
June 2013	WebAssign Users Group Conference, Raleigh, NC
April 2013	Seaway NExT Workshop at SUNY Fredonia, NY
October 2012	Trends in Undergraduate Research Conference, Chicago, IL
April 2012	Seaway NExT Workshop at Hamilton College, Clinton, NY
July 2011	SMPosium for the Summer Math Program at Carleton College, Northfield, MN
April 2011	Seaway NExT Workshop at Nazareth College, Rochester, NY
January 2010	Carleton Summer Math Program for Women SMPosium, San Francisco, CA
April 2008	Preparing Future Faculty Workshop at Syracuse University, NY
November 2007	Symposium to Mark the Birthday of D.J.S. Robinson, Auburn University at Montgomery, AL