# Rebecca Sorsen

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#### Education

The University of Iowa, Iowa City, IA

Ph.D. Mathematics, TBD Advisor: Keiko Kawamuro M.S., Mathematics, May 2020

The University of Nebraska-Lincoln, Lincoln, NE B.S., Mathematics with Honors and Distinction, May 2018

Minors in Statistics and Economics Honors Thesis Advisor: Alex Zupan

### Honors and Awards

RTG Fellowship, University of Iowa, Spring 2022 Nominated for Outstanding TA Award, 2021 Nominated for Hancher-Finkbine Medallion, 2021 ACT Grant, received for Sonia Kovalevsky Day, 2020 Gaan Fellowship, University of Iowa, 2018

Top Poster Award, UNL Undergraduate Spring Research Fair, 2018 Pi Mu Epsilon, inducted into Nebraska Alpha Chapter, 2016 National Society of Leadership and Success, inducted 2015

## Teaching Experience

### The University of Iowa

- MATH1020, Elementary Functions, Instructor, Fall 2021
- Topology Prep Course, Instructor, Summer 2021
- MATH1005, College Algebra, Instructor, Spring 2021
- MATH5400, General Topology, Teaching Assistant, Fall 2020
- MATH1350, Quantitative Reasoning for Business, Teaching Assistant, Fall 2020
- MATH2700, Introduction to Linear Algebra, Grader, Fall 2020
- MATH1380, Calculus and Matrix Algebra for Business, Teaching Assistant, Spring 2020
- MATH2700, Introduction to Linear Algebra, Grader and Homework Lab Leader, Spring 2020
- MATH1340, Mathematics for Business, Teaching Assistant, Fall 2019
- MathLab Tutor, Fall 2019-Spring 2021

#### The University of Nebraska-Lincoln

- MATH107H, Honors Calclus II, Teaching Assistant, Spring 2017
- MATH101, College Algebra, Learning Assistant, Fall 2016
- Mathematics Resource Center Counselor, Fall 2016-Spring 2018

#### StairWay5 STEM Academy

• Math Tutor, Summer 2020-Summer 2021

#### **Publications**

 (with Alex Zupan) The Kauffman Bracket Expansion of a Generalized Crossing, Top. Proc. 58 (2021) pp. 289-301 (E-published on May 3, 2021)

#### Presentations

Constructible Sheaves, Topology Seminar, University of Iowa, April 2021

Modular Tensor Categories, Topology Seminar, University of Iowa, September 2020

Symplectic Surgery, Topology Seminar, University of Iowa, February 2020

The Jones Polynomial of the Generalized Half Twist, Graduate and Undergraduate Student Seminar, University of Iowa, October 2019

The Jones Polynomial of the Generalized Half Twist, MAA Math Fest, Denver, CO, August 2018

The Jones Polynomial of the Generalized Half Twist, Poster Presentation at UNL Spring Undergraduate Research Fair, April 2018

The Jones Polynomial of the Generalized Half Twist, Undergraduate Honors Thesis Defense, March 2018

The Jones Polynomial of the Generalized Half Twist, NCUWM, Lincoln, NE, January 2018

 $Splitting\ Numbers\ of\ Ten-Crossing\ Links,\ MAA\ MathFest,\ Chicago,\ IL,\ July\ 2017$ 

Splitting Numbers of Ten-Crossing Links, NCUWM, Lincoln, NE, February 2017

Splitting Numbers of Ten-Crossing Links, Kansas State Conclusion of REU, July 2016

### Conferences Attended

GSTGC, Online, April 2021

Topology Student Workshop, Atlanta, GA (Online), July 2020

WIMS, Iowa City, IA, April 2019

MAA MathFest, Denver, CO, August 2018 NCUWM, Lincoln, NE, January 2018 MAA MathFest, Chicago IL, July 2017 NCUWM, Lincoln, NE, February 2017

### Involvement

Chair of Math Graduate Board, 2021

Graduate Student Representative of AAU PhD Initiative, 2021 Spoke on a panel about REUs for AWM chapter at UNL, 2020

Vice Chair of Math Graduate Board, 2020

Co-Organizer for Sonia Kovalevksy Day, April 2020

Member of Association of Women in Mathematics, 2019-present

Social Co-Chair of Math Graduate Board, 2019 Volunteer for Sonia Kovalevsky Day, April 2019 Table Host for UNL Women in Science Banquet, 2018