

# ALEXANDER VIDINAS

acv42@cornell.edu

<https://www.vidinas.com/>

## EDUCATION

---

**Cornell University**, Ithaca, NY 2021 - Present  
PhD Candidate in Mathematics (Expected May 2027)  
MS in Mathematics (May 2024)  
Advisor: Karola Mészáros, Research area: Algebraic combinatorics.

**University of Michigan**, Ann Arbor, MI 2017-2021  
Bachelors of Arts and Sciences in Physics and Honors Mathematics.

## GRANTS AND AWARDS

---

Cornell Math Department Research Fellowship. Spring 2025  
Cornell Math Department Torng Teaching Prize. 2024-2025  
Cornell Math Department Eleanor Norton York Award. 2023-2024  
Cornell Math Department Teaching Fellow. Fall 2023  
University of Michigan Math Department Outstanding Senior Award. 2020-2021  
University of Michigan Math Department Evelyn O. Bychinsky Award. 2018-2019  
University of Michigan Merit Scholarship. 2017-2021

## PREPRINTS AND PUBLICATIONS

---

Mészáros, K., Musiker, G., Sherman-Bennett, M., and Vidinas, A. *Dimer face polynomials in knot theory and cluster algebras*, Preprint, 2024, arXiv:2408.11156.

Hafner, E. S., Mészáros, K., and Vidinas, A. *On the Alexander polynomial of special alternating links*, Preprint, 2024, arXiv:2401.14927.

Hafner, E. S., Mészáros, K., and Vidinas, A. *Log-concavity of the Alexander polynomial*, *International Mathematics Research Notices*, Volume 2024, Issue 13, 10273-10284.

## TEACHING

---

Teaching Assistant, Linear Algebra for Data Science. Fall 2024  
Teaching Assistant, Calculus 1, Cornell University. Summer 2024  
Instructor of Record, Calculus 1, Cornell University. Spring 2024  
Teaching Assistant, Mathematical Explorations, Cornell University. Fall 2022, Fall 2023  
REU Mentor, Summer Program for Undergraduate Research, Cornell University. Summer 2023  
Teaching Assistant, Introduction to Proofs. Spring 2023  
Czar's Assistant, Calculus 2, Cornell University. Spring 2021  
Recitation Instructor, Applied Linear Algebra, Cornell University. Fall 2021  
Course Assistant, Honors Calculus 2, University of Michigan. Spring 2020  
Course Assistant, Honors Calculus 1, University of Michigan. Fall 2019  
Peer Tutor in Mathematics, University of Michigan. Fall 2018  
Course Assistant, Honors Calculus 1, University of Michigan. Fall 2018

## SEMINAR AND CONFERENCE ORGANIZATION

---

Co-Organizer, Graduate Seminar in Combinatorics, Cornell University. 2023-Present  
Organizer, Teaching Seminar, Cornell University. Fall 2023  
Co-Organizer, "What Is" Seminar, Cornell University. Fall 2023

## OUTREACH AND MENTORING

---

Co-Organizer, Discrete Mathematical Explorations, Cornell University.	<i>Fall 2022, Spring 2024</i>
Mentor, Association of Women in Math Zigzag Mentoring Program, Cornell University.	<i>2023-2024</i>
Co-Organizer, Graduate Peer Mentoring Program, Cornell University.	<i>2023-2024</i>
Instructor, Cornell University Little Circle, Cornell University.	<i>Spring 2023</i>
Mentor, Graduate Peer Mentoring Program, Cornell University.	<i>2022-2023</i>
Recruiter, Out in STEM, University of Michigan.	<i>2016-2021</i>
Mentor, University of Michigan Young Science Innovators.	<i>August 2019</i>

## TALKS AND PRESENTATIONS

---

<i>On the Alexander polynomial of special alternating links</i>	<i>Jan 2025</i>
Combinatorial Algebra meets Algebraic Combinatorics (CAAC).	
<i>Let's weave! A model for mathematical proficiency</i>	<i>Nov 2024</i>
Teaching Seminar, Cornell University.	
<i>Log-Concavity of the Alexander polynomial</i>	<i>June 2024</i>
Encuentro Colombiano de Combinatoria (ECCO).	
<i>Log-Concavity of the Alexander polynomial</i>	<i>Mar 2024</i>
Graduate Student Combinatorics Conference.	
<i>Creating community in the classroom</i>	<i>April 2024</i>
Teaching Seminar, Cornell University.	
<i>On the Alexander polynomial of special alternating links</i>	<i>Feb 2024</i>
SUNY Binghamton Combinatorics Seminar.	
<i>Log-Concavity of the Alexander polynomial</i>	<i>Jan 2024</i>
Combinatorial Algebra meets Algebraic Combinatorics (CAAC).	
<i>Mario Kart geometry and combinatorics in type B</i>	<i>Fall 2023</i>
Olivetti Seminar, Cornell University.	
<i>Join the Gröbner fandom</i>	<i>Fall 2022</i>
Olivetti Seminar, Cornell University.	

## OTHER WORKSHOPS AND PROGRAMS ATTENDED

---

The Many Combinatorial Legacies of Richard P. Stanley, Cambridge, MA.	<i>June 2024</i>
Math for All in Boulder, Boulder, CO.	<i>Apr 2024</i>
Algebra, Geometry and Combinatorics Day (AlGeCom), Champaign, IL.	<i>Oct 2022</i>

## SKILLS

---

Programming Languages	SageMath, Python, Mathematica, C++ English (native), Romanian (native), Spanish, French
-----------------------	--