

# BEN ADENBAUM

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## Education

**Dartmouth College**, Hanover, NH Sep 2019 - June 2024  
- Ph.D., Mathematics June 2024  
- Thesis Advisor: Sergi Elizalde  
**Lafayette College**, Easton, PA Sep 2015- May 2019  
- B.S. Mathematics with Honors

## Publications

### Publications

- *Rowmotion on 321-avoiding permutations* (with S. Elizalde) *Electron. J. Combin.* 30(3) (2023) #P3.5 <https://doi.org/10.37236/11792>
- *Coloring Groups* (with A. Wilson) *Discrete Math & Theoretical Computer Science* vol. 26:2 (2024) <https://doi.org/10.46298/dmtcs.12753>

### Preprints

- *On the Order of P-Strict Promotion on  $V \times [\ell]$*  arXiv:2308.08757 Submitted
- *Boolean intervals in the weak Bruhat order of a finite Coxeter group* (with J. Elder, P. E. Harris, J. C. Martínez Mori) arxiv:2403.07989 Submitted

## Presentations

### Invited Research Presentations

- “Rowmotion on 321-Avoiding Permutations”, *AMS Special Session on Algebraic and Bijective Methods in Permutation Enumeration* at Joint Math Meetings April 2022

### Contributed Research Presentations

- “Boolean intervals in the weak Bruhat order of a finite Coxeter group” *Graduate Student Combinatorics Conference* March 2024
- “Coloring Groups” (Poster), *Combinatorial Algebra meets Algebraic Combinatorics* January 2024
- “Rowmotion on 321-Avoiding Permutations” (Poster), *Formal Power Series and Algebraic Combinatorics* July 2023
- “Rowmotion on 321-Avoiding Permutations”, *Permutation Patterns* July 2023
- “On the Order of P-Strict Promotion on  $V \times [\ell]$ ”, *Graduate Student Combinatorics Conference* March 2023

### Seminar Talks

University of Wisconsin – Milwaukee	April 2024
Graduate Online Combinatorics Colloquium	November 2023
LACIM at Université du Québec à Montréal	November 2023
Michigan State University	November 2023
North Dakota State University	November 2023
Dartmouth College	May 2022
University of Vermont	April 2022

### Other Conferences and Workshops Attended

- Collaborate @ ICERM (Upcoming)	January 2025
- AMS MRC in Algebraic Combinatorics	June 2024
- Richard Stanley 80th Birthday Conference	June 2024
- ALCOVR Workshop in Dynamical Algebraic Combinatorics	May 2024
- AMS Spring Eastern Sectional	April 2024
- 48th Annual New York State Regional Graduate Mathematics Conference	April 2023
- Permutation Patterns	June 2022
- BIRS 5-Day Workshop on Dynamical Algebraic Combinatorics (Virtual)	November 2021
- Permutation Patterns (Virtual)	April 2021

### Teaching

#### Instructor *Dartmouth College*

- Math 3 Introduction to Calculus	Fall 2021
- Math 9 Multivariable Calculus with Linear Algebra	Fall 2022
- Math 28 Introduction to Combinatorics	Winter 2024

#### Teaching Assistant, *Dartmouth College*

- Math 8 Calculus of Functions of one and Several Variables	Fall 2019
- Math 10 Introductory Statistics	Spring 2020 online over Zoom
- Math 108 Topics in Combinatorics	Fall 2020 online over Zoom
- Math 3 Introduction to Calculus	Winter 2021 online over Zoom

#### Teaching Assistant, *Lafayette College*

- Lab Teaching Assistant for Applied Statistics	Fall 2017
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### Service and Outreach

- Dartmouth Combinatorics Seminar Co-organizer	Fall 2022-Spring 2024
- Dartmouth College <i>Directed Reading Program</i> Co-organizer	Winter 2023-Winter 2024
- Session Moderator, Graduate Student Combinatorics Conference	March 2023

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## **Programming Languages**

Java, R, Python, Sage