

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
- Minor Computer Science

Employment

Florida Gulf Coast University, Fort Myers, FL August 2024 - Present
- Visiting Assistant Professor, Department of Mathematics, College of Arts and Sciences

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 and In Preparation

- *On the Order of P-Strict Promotion on $V \times [\ell]$* arXiv:2308.08757 Submitted
- *Counting 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
- *Avoiding a Single Pattern in the Bruhat Order* In Preparation

Presentations

Invited Research Presentations

- Title to be determined *AMS Special Session on Dynamical Algebraic Combinatorics* at AMS Spring Eastern Sectional (Upcoming) April 2025
- Title to be determined *AMS Special Session on Enumerative and Dynamical Combinatorics* at AMS Spring Southeastern Sectional (Upcoming) March 2025

- “Avoiding a Single Pattern in the Bruhat Order”, *AMS Special Session on Permutation Patterns* at AMS Fall Eastern Sectional October 2024
- “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 *Florida Gulf Coast University*

- MAT 1033 Intermediate Algebra (2 Sections) Fall 2024

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- MAC 1147 Precalculus Fall 2024
- MAC 2233 Elementary Calculus 1 (2 Sections) Spring 2025 (Upcoming)
- MAS 3105 Linear Algebra Spring 2025 (Upcoming)

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
- Math 28 Introduction to Combinatorics Winter 2023

Teaching Assistant, *Lafayette College*

- Lab Teaching Assistant for Applied Statistics Fall 2017

Service and Outreach

- Dartmouth Combinatorics Seminar Co-organizer Fall 2022-Spring 2024
- Dartmouth College *Directed Reading Program* Co-organizer Winter 2023-Winter 2024

Referee For

- Electronic Journal of Combinatorics 2024

Programming Languages

Java, R, Python, Sage