Ben Adenbaum

Contact
Information

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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
- *On the Order of P-Strict Promotion on $V \times [\ell]$* arXiv:2308.08757 to appear in *Electron. J. Combin.*
- *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 to appear in *Discrete Math. Lett.*

Preprints and In Preparation
- *Avoiding a Single Pattern in the Bruhat Order* In Preparation

Presentations

Invited Research Presentations
- "On the Toggleability Spaces of the Product of Two Chains" *AMS Special Session on Dynamical Algebraic Combinatorics* at AMS Spring Eastern Sectional (Upcoming)   April 2025

- "On the Order of P-Strict Promotion on $V \times [\ell]$" *AMS Special Session on Enumerative and Dynamical Combinatorics* at AMS Spring Southeastern Sectional — 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 Wisonsin – 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

- BIRS 5-Day Workshop on Lattice Theory — January 2025
- Collaborate @ ICERM — 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
- MAC 1147 Precalculus   Fall 2024
- MAC 2233 Elementary Calculus 1 (2 Sections)   Spring 2025
- MAS 3105 Linear Algebra   Spring 2025

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*   Fall 2017
- Lab Teaching Assistant for Applied Statistics

Service and Outreach

- Dartmouth Combinatorics Seminar Co-organizer   Fall 2022-Spring 2024
- Dartmouth College *Directed Reading Program* Co-organizer   Winter 2023-Winter 2024
- Florida Gulf Coast University Colloquium Committee   August 2024 - Present
- Florida Gulf Coast University ASPiRE Committee   August 2024 - Present
  Referee For
- Electronic Journal of Combinatorics

Programming Languages

Java, R, Python, Sage