Adam D. Gregory

Department of Mathematics
University of Florida

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EDUCATION

Doctor of Philosophy, Mathematics
University of Florida; Gainesville, FL   Expected May 2025
Advisor: Zachary Hamaker

Bachelor of Science, Mathematics
Western Carolina University; Cullowhee, NC   May 2019
Minor in Chemistry
Summa Cum Laude

TEACHING EXPERIENCE

Instructor
- MAC1114 — Trigonometry   Fall 2024
  University of Florida
- MAC2313 — Analytical Geometry & Calculus III   Summer 2024
  University of Florida
- MAC1114 — Trigonometry   Spring 2024
  University of Florida

Teaching Assistant
- MAC2233 — Survey of Calculus I   Fall 2023
  University of Florida
- MAC2234 — Survey of Calculus II   Fall 2023
  University of Florida
- MAC2313 — Analytical Geometry & Calculus III   Fall 2021
  University of Florida
- MAC1147 — Precalculus, Algebra & Trigonometry   Spring 2020
  University of Florida
- MAC2313 — Precalculus, Algebra & Trigonometry   Fall 2019
  University of Florida
- MATH250 — Introduction to Logic & Proof   Fall 2018
  Western Carolina University

TEACHING AWARDS

- UF Mathematics Graduate Student Teaching Award   Fall 2021 - Spring 2022
  University of Florida

MENTORING

- Undergraduate research mentor for Raymond Ying   Fall 2024
  University of Florida
- Graduate student mentor for Fatima Akinola and Sean Mandrick   Fall 2021 - Spring 2024
  University of Florida
- Undergraduate research mentor for Hugh Dennin   Spring 2022 - Fall 2022
  University of Florida

PUBLICATIONS

1. Lenart's Bijection via Bumpless Pipe Dreams
   The Electronic Journal of Combinatorics **30(1)** (2023), #P1.24
   A. Gregory and Z. Hamaker
2. Pattern Restricted quasi-Stirling Permutations
   Australas. J. Combin. **74(3)** (2019), 389–407
   K. Archer, A. Gregory, B. Pennington and S. Slayden
3. Edge-Transitive Graphs and Combinatorial Designs
   Involve, a Journal of Mathematics **12-8** (2019), 1329–1341
   A. Gregory, D. Narayan, H. Newman and H. Miranda
4. Infinite Families of Asymmetric Graphs
   AKCE International Journal of Graphs and Combinatorics, **17-3** (2020), 1000–1009
   A. Brewer, A. Gregory, Q. Jones, L. Rodriguez, R. Flórez and D. Narayan

PREPRINTS

5. Tableau formula for vexillary double Edelman–Greene coefficients
   arXiv: 2412.20615
   A. Gregory, Z. Hamaker and T. Yu
6. The Asymmetric Index of a Graph
   arXiv: 1808.10467
   A. Brewer, E. Farnsworth, N. Gomez, A. Gregory, Q. Jones, H. Lino and D. Narayan
7. On Covers of Dihedral 2-Groups by Powerful Subgroups
   arXiv: 1901.03372
   R. Atanasov, A. Gregory, L. Guatelli and A. Penland

IN PREPARATION

8. Permutations with only reduced co-BPDs
   J. Arroyo and A. Gregory

PRESENTATIONS

1. "Permutations with only reduced co-BPDs"   December 2024
   Michigan State University, Combinatorics & Graph Theory Seminar (online)
2. "Open problems on flattened Stirling permutations"   September 2024
   University of Florida, Combinatorics Learning Seminar
3. "Open problem on bumpless pipe dreams and Kohnert diagrams"   September 2024
   University of Florida, Combinatorics Learning Seminar
4. "Vexillary double Edelman–Greene coefficients are Graham positive" (poster)   February 2024
   University of Florida, SaganFest Conference
5. "Vexillary double Edelman–Greene coefficients are Graham positive"   November 2023
   North Carolina State University, Algebra & Combinatorics Seminar
6. "Utility of combinatorial formulas for special polynomials"   September 2023
   University of Florida, Graduate Student Colloquium
7. "Vexillary double Stanley symmetric functions"   April 2023
   Michigan State University, Combinatorics & Graph Theory Seminar (online)
8. "Lenart's Bijection via Bumpless Pipe Dreams"   November 2022
   Kennesaw State University, Discrete Mathematics Seminar
9. "Some open problems from a new insertion algorithm"   October 2022
   University of Florida, Combinatorics Learning Seminar

10. "The Asymmetric Index of a Graph" November 2019
    University of Florida, Combinatorics Seminar
11. "Pattern Restricted quasi-Stirling Permutations" November 2019
    AMS Fall Southeastern Sectional Meeting; Gainesville, FL
12. "Computational Chemistry Studies of Europium (III) Metal-based April 2019
    Coordination Complexes for Luminescent Applications" (poster)
    Kennesaw State University, National Conference on Undergraduate Research
13. "The Asymmetric Index of a Graph and Families of Asymmetric Graphs" March 2019
    MAA Southeastern Section Conference at Lee University
14. "The Powerful Subgroup Covering Number of Dihedral 2-Groups" January 2019
    Joint Mathematics Meetings Contributed Session; Baltimore, MD
15. "The Asymmetric Index of a Graph and Families of Asymmetric Graphs" January 2019
    Joint Mathematics Meetings Special Session; Baltimore, MD
16. "The Asymmetric Index of a Graph" November 2018
    University of South Carolina, Carolina Math Seminar
17. "The Asymmetric Index of a Graph" October 2018
    Western Carolina University, Departmental Colloquium
18. "p-Groups Covered by Powerful p-Subgroups" March 2018
    MAA Southeastern Section Conference at Clemson University
19. "Pattern Avoidance and Statistics of quasi-Stirling Permutations" (poster) January 2018
    Joint Mathematics Meetings; San Diego, CA
20. "Pattern Avoidance and Statistics of quasi-Stirling Permutations" November 2017
    UNC Greensboro, Regional Mathematics and Statistics Conference
21. "Pattern Avoidance and Statistics of quasi-Stirling Permutations" September 2017
    Western Carolina University, Departmental Colloquium

SERVICE

- Organizer for the Combinatorics Learning Seminar Fall 2024 - Spring 2025
  University of Florida
- Organizer and founder of the Professional Development Seminar Fall 2021 - Spring 2022
  University of Florida
- Committee member for Chancellor's Distinguished Teaching Award Fall 2018 - Spring 2019
  Western Carolina University
- Hiring committee member for Mathematics Tutoring Center Fall 2018 - Spring 2019
  Western Carolina University
- Advisory Board member for Mathematics Tutoring Center Fall 2018 - Spring 2019
  Western Carolina University
- Departmental Office Assisstant Fall 2018 - Spring 2019
  Mathematics & Computer Science Department
  Western Carolina University
- Departmental Student Ambassador Fall 2017 - Spring 2019
  Mathematics & Computer Science Department
  Western Carolina University

OTHER AWARDS

- Dean's Outstanding Scholar Award Fall 2018 - Spring 2019
  Western Carolina University

- Senior Mathematics Excellence Award Fall 2018 - Spring 2019
  Western Carolina University
- Walt and Susan Patterson Prize ($100) – Outstanding Presentation March 2019
  MAA Southeastern Section Conference at Lee University
- Mathematics Jeopardy Contest (First Place) March 2019
  MAA Southeastern Section Conference at Lee University
- Crum Mathematics Scholarship Fall 2017 - Spring 2019
  Western Carolina University
- Curtis and Enid Meltzer Scholarship Fall 2017 - Spring 2019
  Western Carolina University
- Freshman Mathematics Excellence Award Fall 2015 - Spring 2016
  Western Carolina University
- Chancellor's List (3.8 GPA or higher) Fall 2015 - Spring 2019
  Western Carolina University
- Chancellor's Academic Scholarship Award Fall 2015 - Spring 2019
  Western Carolina University

EXTRACURRICULAR ACTIVITIES

- Mathematics Club
  President Fall 2018 - Spring 2019
  Vice President Fall 2017 - Spring 2018
  Member Fall 2015 - Spring 2019
  Western Carolina University
- *Kryptos* – International Cryptanalysis Challenge Spring 2017, 2018, & 2019
- William Lowell Putnam Contest Fall 2016, 2017, & 2018
- Mathematics Jeopardy Team Fall 2016 - Spring 2019
  Western Carolina University