Zachary Porat | Curriculum Vitae

✉ zporat@wesleyan.edu   ↖ zporat.github.io

📍 Wesleyan University, Department of Mathematics and Computer Science, Middletown, CT

Education

Wesleyan University | Middletown, CT   2020 – Present

    Ph.D. Candidate in Mathematics
    Advisor: David Pollack

Union College | Schenectady, NY   2016 – 2020

    Bachelor of Science in Mathematics with Honors, *summa cum laude*
      Honors Thesis: Classification of Torsion Subgroups for Mordell Curves
    Physics Minor, Phi Beta Kappa, Scholars Program

Teaching Experience

Instructor of Record | Wesleyan University   Fall 2022 – Present

- Elementary Statistics (Fall 2022)

Teaching Assistant | Wesleyan University   Fall 2021 – Present

- Introduction to Abstract Algebra (Fall 2023)
- Introduction to Real Analysis (Spring 2022, Spring 2023)
- Discrete Mathematics (Fall 2021)

Directed Reading Program Mentor | Wesleyan University   Spring 2023 – Present

- William Dollhopf, Mathematical Cryptography (Fall 2023)
- Emily Bennett, Mathematical Cryptography (Spring 2023)
- Mieke Hesseling, Mathematical Cryptography (Spring 2023)

Math Workshop Tutor | Wesleyan University   Fall 2020 – Spring 2021

- Covers the entire selection of undergraduate math courses at Wesleyan

Course Assistant | Union College   Fall 2017 – Winter 2020

- Calculus I (Fall 2017, Fall 2018, Fall 2019)
- Calculus II (Winter 2018, Winter 2019)
- Multivariable Calculus with Linear Algebra (Spring 2018)
- Linear Algebra (Winter 2020)

Calculus Help Center Tutor | Union College   Fall 2019 – Winter 2020

- Covers Calculus I, Calculus II, and Multivariable Calculus with Linear Algebra

Publications

[2] **Family Sizes for Complete Multipartite Graphs** (with Danielle Gregg, Thomas Mattman, and George Todd), *Involve, a Journal of Mathematics*, Vol. 15, No. 4 (2022), 669-686.

    🔗 [MR4536581](#), DOI: [10.2140/involve.2022.15.669](#)

[1] **PIXE Analysis of Synthetic Turf** (with Sajju Chalise, Morgan Clark, Skye Conlan, Scott LaBrake, and Michael Vineyard), *Environment and Ecology Research*, Vol. 6, No. 1 (2018), 60-65.

    🔗 DOI: [10.13189/eer.2018.060105](#)

Talks

"Death at 20: The Story of Évariste Galois" March 9, 2023

    📍 Graduate Student Seminar, Wesleyan University

"The Search for Large Prime Numbers" January 12, 2023

    📍 Union College Math Seminar

"An Introduction to Cryptography" February 10, 2022

    📍 Graduate Student Seminar, Wesleyan University

"An Introduction to Elliptic Curves" October 14, 2021

    📍 Graduate Student Seminar, Wesleyan University

Workshops Attended

Connecticut Summer School in Number Theory June 6-12, 2022

    📍 University of Connecticut

Connecticut Summer School in Number Theory June 8-14, 2020

    📍 Online due to COVID-19

Service

- Co-organizer of the Directed Reading Program Spring 2023 – Present
  - The Directed Reading Program is an initiative that pairs undergraduate students with graduate student mentors to undertake independent study projects in subjects outside the standard curriculum. The project culminates in the undergraduate student giving a public math lecture at the end of the semester. 🔗

- President of the Wesleyan AMS Graduate Student Chapter Fall 2023 – Present
  - In this role, I lead the chapter in organizing and executing events that foster community engagement in mathematical ideas. These events bring together interested undergraduate and graduate students. 🔗

- Creator and editor of the departmental graduate student website Fall 2021 – Present

- Co-organizer of the departmental Graduate Student Seminar   Spring 2022 – Present
    - In this role, I help organize a weekly seminar that provides graduate students with a comfortable environment in which to practice delivering talks, whether it be in preparation for external talks or simply sharing their interests with their peers. ↗
- Vice President of the Wesleyan AMS Graduate Student Chapter   Fall 2021 – Spring 2023

Honors and Awards

- Martin Terry Resch Prize   May 2020
- Phi Beta Kappa Membership   May 2020
- Pi Mu Epsilon Membership   April 2019

References

- David Pollack, dpollack@wesleyan.edu