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

Expected 2026

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

- Advanced Topics in Abstract Algebra (Spring 2024)
- 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)
- Stefan 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

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

Calculus Help Center Tutor | Union College

Fall 2019 – Winter 2020

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

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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.

Ø DOI: 10.13189/eer.2018.060105

Talks

"How Computers are Shaping Math"

November 15, 2023

March 9, 2023

Graduate Student Seminar, Wesleyan University

"The Search for Large Prime Numbers"

Union College Math Seminar

"An Introduction to Cryptography"

Graduate Student Seminar, Wesleyan University

"An Introduction to Elliptic Curves"

Graduate Student Seminar, Wesleyan University

"An Introduction to Elliptic Curves"

October 14, 2021

Graduate Student Seminar, Wesleyan University

Workshops

Arizona Winter School: Abelian Varieties

¶ University of Arizona

Connecticut Summer School in Number Theory

¶ University of Connecticut

Connecticut Summer School in Number Theory

¶ University of Connecticut

University of Connecticut

June 8-14, 2020

¶ Online due to COVID-19

Service

 Co-organizer of the Directed Reading Program 	Spring 2023 – Present
• President of the Wesleyan AMS Graduate Student Chapter 🗹	Fall 2023 – Present
• Creator and editor of the departmental graduate student website	Fall 2021 – Present
$ullet$ Co-organizer of the departmental Graduate Student Seminar ${\color{red} {\Bbb Z}}$	Spring 2022 – Fall 2023
Vice President of the Wesleyan AMS Graduate Student Chapter	Fall 2021 – Spring 2023

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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