# Asimina S. Hamakiotes

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asiminah.github.io


## Education

**University of Connecticut** — Storrs, CT
Ph.D. in Mathematics, Advisor: Álvaro Lozano-Robledo — 2020–Present

**Macaulay Honors at Baruch College** — New York City, NY
B.A. in Mathematics, GPA: 3.73 — 2016–2020
Minors: Philosophy, Interdisciplinary Minor with Honors in New York City Studies

**Budapest Semesters in Mathematics** — Budapest, Hungary
Study abroad program — Spring 2019

## Research Experience

**Honors Thesis in Number Theory** — Fall 2019 - Spring 2020
Advisor: Andrew Obus

- Researched the distribution of the greatest common divisors of Gaussian integers and other quadratic integer rings.

**Number Theory REU at Texas A&M University** — Summer 2019
Advisor: Riad Masri

- Researched and proved the equidistribution of the crank partition function with an effective asymptotic bound on the error.

**Number Theory REU at Oregon State University** — Summer 2018
Advisor: Holly Swisher

- Researched modular forms and elliptic curves and produced results for eta-quotients of prime or semiprime level and elliptic curves.

## Publications

1. Asimina Hamakiotes, *The Distribution of the Greatest Common Divisors of Elements in Quadratic Integer Rings*, (2020), https://academicworks.cuny.edu/bb_etds/99/.
2. Asimina Hamakiotes, Aaron Kriegman, and Wei-Lun Tsai, *Asymptotic Distribution of the Partition Crank*, to appear in Ramanujan Journal (2021), https://arxiv.org/abs/1909.12806.
3. Michael Allen, Nicholas Anderson, Asimina Hamakiotes, Ben Oltsik, and Holly Swisher, *Eta-quotients of prime or semiprime level and elliptic curves*, Involve, Vol. 13, No. 5 (2020), 879-900. https://arxiv.org/abs/1901.10511.

## Awards

- Graduate Fellowship for STEM Diversity ($20,000 annually) — 2022 - Present
- NCAA Woman of the Year Semifinals — 2019–2020
- Kanner Prize for Outstanding Baruch Honors Thesis — 2019–2020
- CUNY Athletic Conference Female Scholar-Athlete of the Year — 2019–2020
- Dr. Jane Katz Academic, Athletics, and Community Service Award — 2019–2020

- Meyer Scholar Recipient, Merit Based Scholarship ($4,000) 2018
- 2nd place in Traders@MIT (largest algorithmic collegiate trading competition) 2017

## Teaching

- MATH 1020Q Problem Solving, Instructor Fall 2022
- MATH 1132Q Calculus II, Teaching Assistant Spring 2022
- MATH 1132Q Calculus II Honors, Teaching Assistant Fall 2021
- MATH 1132Q Calculus II, Teaching Assistant Spring 2021
- MATH 1131Q Calculus I, Teaching Assistant Fall 2020

## Mentoring

- Directed Reading Program, mentor to Sierra Woods (project on elliptic curves) Spring 2022

## Invited Talks

- **Joint Mathematics Meetings, Denver** 1/15/20 - 1/18/20
  *Asymptotic Distribution of the Partition Crank*
  MAA Undergraduate Student Poster Session **Received Honorable Mention*
- **James Madison University** 9/21/19
  *Asymptotic Distribution of the Partition Crank*
  Shenandoah Undergraduate Mathematics and Statistics Conference (SUMS) - Talk
- **University of Nebraska - Lincoln** 1/25/19 - 1/27/19
  *Eta-Quotients of Prime or Semiprime Level and Elliptic Curves*
  Nebraska Conference for Undergraduate Women in Mathematics (NCUWM) - Talk
- **Joint Mathematics Meetings, Baltimore** 1/16/19 - 1/19/19
  *Eta-Quotients of Prime or Semiprime Level and Elliptic Curves*
  MAA Undergraduate Student Poster Session
- **James Madison University** 10/13/18
  *Eta-Quotients of Prime/Semiprime Level and Elliptic Curves*
  Shenandoah Undergraduate Mathematics and Statistics Conference (SUMS) - Talk
- **Smith College** 9/22/18
  *Eta-Quotients of Prime or Semiprime Level and Elliptic Curves*
  Women in Mathematics in New England Conference (WIMIN) - Talk

## Presentations

- **Successful Baruch Alumni Panel**, panelist Nov. 9, 2021
- **Mathematics Continued Conference**, Graduate school panel (panelist) Oct. 23, 2021
- **UConn Math Club**, Preparing for graduate school (panelist) April 21, 2021
- **Baruch Math Club**, Undergraduate math experience (panelist) March 26, 2021
- **UConn Number Theory Reading Group**, Lubin-Tate formal group laws Feb. 26, 2021
- **UConn Math Club**, Undergraduate math research (panelist) Nov. 11, 2020

## Instructional Schools Attended

- **PCMI Graduate Summer School** July 17 - August 6, 2022
  Park City Mathematics Institute (PCMI) Graduate Summer School in Number Theory Informed by Computation.
- **Connecticut Summer School in Number Theory (CTNT)** June 6 - 12, 2022
- **PCMI Graduate Summer School (Virtual)** July 26-30, 2021
  Park City Mathematics Institute (PCMI) Graduate Summer School in Number Theory Informed by Computation.
- **Arizona Winter School (AWS)** Spring 2021
  AWS Virtual School in Number Theory was a 12 week program featuring four online lecture series (and problem solving sessions) on modular forms, modular groups, an exploration of the $p$-adic numbers and modular forms, and quadratic forms and the local global principle.

## Clubs/Leadership

- **UConn Number Theory Reading Group (NTRG):** Member Summer 2020 –Present
  *We study various topics related to number theory, such as p-adics, class field theory (I gave a talk on the Lubin-Tate formal group laws), and we are currently reading some research papers on unit groups. We are learning about how to compute unit groups in cubic fields and will try to expand upon related research.*
- **AWM Baruch Student Chapter:** President/Founder Fall 2019 –Spring 2020
  *Started the Association for Women in Mathematics (AWM) Student Chapter at Baruch, organized events, shared knowledge and experience in math, research, math study abroad programs, internships, and mathematical jobs in industry.*
- **Baruch Traders Club:** Trader Spring 2017 –Spring 2018
  *Gained experience and knowledge of financial markets via trading simulations and trading seminars. Competed in various Baruch and intercollegiate trading competitions.*

## Languages

- English - fluent (U.S. Citizen)
- Greek - fluent (Dual Citizen)
- Spanish - proficient
- French - intermediate

## Computer Skills

- Magma
- SageMath
- Mathematica
- C++, Java, and Python (novice)