Asimina S. Hamakiotes

asimina.hamakiotes@uconn.edu
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
- CLAS Course Improvement Mini Grant ($1,500) — August 2022
  (Created a module for an inquiry-based mathematical modeling course.)
- 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

- **PAlmetto Number Theory Series XXXIV (PANTS 34)** 9/24/22 - 9/25/22
  Computing the Proportion of Sneaky Primes for Pairs of Elliptic Curves - Talk
  University of North Carolina at Charlotte
- **Joint Mathematics Meetings, Denver** 1/15/20 - 1/18/20
  Asymptotic Distribution of the Partition Crank
  MAA Undergraduate Student Poster Session **Received Honorable Mention*
- **Shenandoah Undergraduate Mathematics and Statistics Conference (SUMS)** 9/21/19
  Asymptotic Distribution of the Partition Crank - Talk
  James Madison University
- **Nebraska Conference for Undergraduate Women in Mathematics (NCUWM)** 1/25/19 - 1/27/19
  Eta-Quotients of Prime or Semiprime Level and Elliptic Curves - Talk
  University of Nebraska - Lincoln
- **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
- **Shenandoah Undergraduate Mathematics and Statistics Conference (SUMS)** 10/13/18
  Eta-Quotients of Prime/Semiprime Level and Elliptic Curves - Talk
  James Madison University
- **Women in Mathematics in New England Conference (WIMIN)** 9/22/18
  Eta-Quotients of Prime or Semiprime Level and Elliptic Curves - Talk
  Smith College

Presentations

- **Computing the proportion of sneaky primes for pairs of elliptic curves**,
  Oregon State University Number Theory Seminar Oct. 18, 2022
- **Computationally hard problems and their uses in cryptography**,
  UConn Math Club Oct. 5, 2022
- **Computing the proportion of sneaky primes for pairs of elliptic curves**,
  UConn S.I.G.M.A. Seminar Sept. 30, 2022

- **Computing the proportion of sneaky primes for pairs of elliptic curves**,
  UConn Algebra Seminar — Sept. 14, 2022
- **Successful Baruch Alumni Panel (panelist)**, Baruch College — Nov. 9, 2021
- **Graduate school panel (panelist)**, Mathematics Continued Conference — Oct. 23, 2021
- **Preparing for graduate school (panelist)**, UConn Math Club — April 21, 2021
- **Undergraduate math experience (panelist)**, Baruch Math Club — March 26, 2021
- **Lubin-Tate formal group laws**,
  UConn Number Theory Reading Group — Feb. 26, 2021
- **Undergraduate math research (panelist)**, UConn Math Club — Nov. 11, 2020

Instructional Schools Attended / Workshops

- **Preliminary Arizona Winter School (PAWS)** — Oct. 3 - Nov. 11, 2022
  PAWS is a virtual program on topics related to the upcoming AWS. Topic: Heights in Diophantine geometry.
- **PCMI Graduate Summer School** — July 17 - August 6, 2022
  Park City Mathematics Institute (PCMI) Graduate Summer School in Number Theory Informed by Computation.
- **Rethinking Number Theory 3 (RNT3)** — June 20 - July 1, 2022
  Project on computing the proportion of sneaky primes for pairs of elliptic curves.
- **Connecticut Summer School in Number Theory (CTNT)** — June 6 - 12, 2022
  Participated and helped run both the summer school and conference.
- **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.

Professional Services

- **Mathematics Continued Conference (MCC):** Organizer — Oct. 22, 2022
  The MCC at UConn is aimed at undergraduates to give a glimpse of what graduate school and math research is like.

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 - novice

Computer Skills

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