Asimina S. Hamakiotes

EDUCATION

University of Connecticut

Storrs, CT

Ph.D. in Mathematics

2020-Present

Advisor: Álvaro Lozano-Robledo

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 INTERESTS

Algebraic number theory and arithmetic geometry.

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) (Created a module for an inquiry-based mathematical modeling course.)	August 2022
• 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

INVITED TALKS

• Bing. Uni. Graduate Combinatorics, Algebra, and Topology Conference (BUGCAT) 11/5/22 - 11/6/22 Computing the Proportion of Sneaky Primes for Pairs of Elliptic Curves - Talk Binghamton University

• Conférence de théorie des nombres Québec-Maine Computing the Proportion of Sneaky Primes for Pairs of Elliptic Curves - Talk Université Laval	10/15/22 - 10/16/22
• PAlmetto Number Theory Series XXXIV (PANTS 34) Computing the Proportion of Sneaky Primes for Pairs of Elliptic Curves - Talk University of North Carolina at Charlotte	9/24/22 - 9/25/22
• Joint Mathematics Meetings, Denver Asymptotic Distribution of the Partition Crank MAA Undergraduate Student Poster Session *Received Honorable Mention	1/15/20 - 1/18/20
• Shenandoah Undergraduate Mathematics and Statistics Conference (SUMS) Asymptotic Distribution of the Partition Crank - Talk James Madison University	9/21/19
• Nebraska Conference for Undergraduate Women in Mathematics (NCUWM) Eta-Quotients of Prime or Semiprime Level and Elliptic Curves - Talk University of Nebraska - Lincoln	1/25/19 - 1/27/19
• Joint Mathematics Meetings, Baltimore Eta-Quotients of Prime or Semiprime Level and Elliptic Curves MAA Undergraduate Student Poster Session	1/16/19 - 1/19/19
• Shenandoah Undergraduate Mathematics and Statistics Conference (SUMS) Eta-Quotients of Prime/Semiprime Level and Elliptic Curves - Talk James Madison University	10/13/18
• Women in Mathematics in New England Conference (WIMIN) Eta-Quotients of Prime or Semiprime Level and Elliptic Curves - Talk Smith College	9/22/18
SEMINAR TALKS	
• 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
• Lubin-Tate formal group laws, UConn Number Theory Reading Group	Feb. 26, 2021
Teaching	
MATH 2210Q Applied Linear Algebra, Instructor	Spring 2023
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	

Spring 2022

• Directed Reading Program, mentor to Sierra Woods (project on elliptic curves)

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.

• Honors Thesis in Number Theory, Advisor: Andrew Obus

Fall 2019 - Spring 2020

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

• Number Theory REU at Texas A&M University, Advisor: Riad Masri

Researched and proved the equidistribution of the crank partition function with an effective asymptotic bound on the error. (Paper in the Ramanujan Journal.)

• Number Theory REU at Oregon State University, Advisor: Holly Swisher Researched modular forms and elliptic curves and produced results for eta-quotients of prime or semiprime level and elliptic curves. (Paper in the Involve Journal.)

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.

Professional Activities

• 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

• Undergraduate math research (panelist), UConn Math Club

Nov. 11, 2020

Clubs/Leadership

• UConn Number Theory Reading Group (NTRG): Member

Summer 2020 -Present

We study various topics related to number theory. We have studied the p-adics and class field theory. We are currently reading about modular forms and modular curves.

• 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)