asimina.hamakiotes@uconn.edu asiminah.github.io

Asimina S. Hamakiotes

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.
- 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.) Summer 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 Meyer Scholar Recipient, Merit Based Scholarship (\$4,000) 2nd place in Traders@MIT (largest algorithmic collegiate trading competition) TEACHING	2019–2020 2018 2017		
		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 Asymptotic Distribution of the Partition Crank MAA Undergraduate Student Poster Session *Received Honorable Mention	1/15/20 - 1/18/20		
• James Madison University Asymptotic Distribution of the Partition Crank Shenandoah Undergraduate Mathematics and Statistics Conference (SUMS) - Talk	9/21/19		
• University of Nebraska - Lincoln Eta-Quotients of Prime or Semiprime Level and Elliptic Curves Nebraska Conference for Undergraduate Women in Mathematics (NCUWM) - Talk	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		
• James Madison University Eta-Quotients of Prime/Semiprime Level and Elliptic Curves Shenandoah Undergraduate Mathematics and Statistics Conference (SUMS) - Talk	10/13/18		
• Smith College Eta-Quotients of Prime or Semiprime Level and Elliptic Curves Women in Mathematics in New England Conference (WIMIN) - Talk	9/22/18		
Presentations			
• 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 generalizing from elliptic to hyperelliptic.

• 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

Computer Skills

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

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