

EDUCATION

University of Connecticut (UConn)

M.S. and Ph.D. in Mathematics

Advisor: Álvaro Lozano-Robledo

Storrs, CT

2020 – 2025

– Ph.D. Thesis: *Abelian Extensions Arising from Elliptic Curves with Complex Multiplication*

Macaulay Honors at Baruch College

B.A. in Mathematics

Minors: Philosophy, Interdisciplinary Minor with Honors in New York City Studies

New York City, NY

2016 – 2020

– Honors Thesis: *The Distribution of the Greatest Common Divisors of Elements in Quadratic Integer Rings*

Budapest Semesters in Mathematics

Study abroad program

Budapest, Hungary

Spring 2019

EMPLOYMENT

Fordham University

Department of Mathematics, *Peter M. Curran Visiting Assistant Professor*

New York City, NY

Fall 2025 – Present

RESEARCH INTERESTS

Algebraic number theory and arithmetic geometry. Elliptic curves and Galois representations.

PUBLICATIONS

1. Asimina S. Hamakiotes and Jun Bo Lau, *Genus formulas for families of modular curves*, to appear in LuCaNT: LMFDB, Computation, and Number Theory proceedings, Contemporary Mathematics (2025).
2. Asimina S. Hamakiotes, *The maximal abelian extension contained in a division field of an elliptic curve over \mathbb{Q} with complex multiplication*, to appear in Mathematische Zeitschrift (2025).
3. Santiago Arango-Piñeros, María Chara, Asimina S. Hamakiotes, Kiran Kedlaya, and Gustavo Rama, *Bounds for the relative class number problem for function fields*, Journal of Number Theory, Vol. 278, 977-1010 (2026).
4. Eduardo Dueñez, Asimina S. Hamakiotes, and Steven J. Miller, *Sums of Powers by L'Hopital's Rule*, The Fibonacci Quarterly, 1-11 (2025).
5. Asimina S. Hamakiotes and Álvaro Lozano-Robledo, *Elliptic curves with complex multiplication and abelian division fields*, Journal of the London Mathematical Society, Vol. 110, No. 6, e70031 (2024).
6. Alyson Deines, Asimina S. Hamakiotes, Andreea Iorga, Changningphaabi Namoiyam, Manami Roy, and Lori D. Watson, *Towards a classification of p^2 -discriminant ideal twins over number fields*, to appear in Research Directions in Number Theory: Women in Numbers VI (2024).
7. John Cullinan, Shanna Dobson, Linda Frey, Asimina S. Hamakiotes, Roberto Hernandez, Nathan Kaplan, Jorge Mello, and Gabrielle Scullard, *The probability of non-isomorphic group structures of isogenous elliptic curves in finite field extensions, II*, Journal of Number Theory, Vol. 266, 131-165 (2025).

8. Asimina Hamakiotes, Aaron Kriegman, and Wei-Lun Tsai, *Asymptotic Distribution of the Partition Crank*, Ramanujan Journal, Vol. 56, 803-820 (2021).
9. 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, 879-900 (2020).

IN PREPARATION

1. Alyson Deines, Asimina S. Hamakiotes, Andreea Iorga, Changningphaabi Namoiijam, Manami Roy, and Lori D. Watson, *Towards a classification of n -discriminant ideal twins over number fields*.
2. Asimina S. Hamakiotes, Jacob Mayle, Sung Min Lee, and Tian Wang, *Coprime reduction of elliptic curves*

AWARDS

- Michael Neumann Dissertation Award, UConn (\$1,000) 2025
- Graduate Fellowship for STEM Diversity (\$20,000 annually) 2022 – 2025
- Predoctoral Fellowship from The Graduate School and Math Department, UConn (\$8,078) Spring 2025
- Summer Doctoral Dissertation Fellowship from The Graduate School, UConn (\$2,000) Summer 2024
- Louis J. DeLuca Teaching Award: Excellence in Teaching, UConn (\$400) 2023 – 2024
- Conference Participation Award from The Graduate School, UConn (\$750) Spring 2024
- CLAS Course Improvement Mini Grant (\$1,500) Summer 2022
(Created a module for an inquiry-based mathematical modeling course.)
- Kanner Prize for Outstanding Baruch Honors Thesis 2019 – 2020
- NCAA Woman of the Year Semifinals 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

Fordham University

- MATH 1206 Calculus I, Instructor Fall 2025
- MATH 2008 Vector Calculus (Calculus III), Instructor Fall 2025

University of Connecticut

- MATH 2705W Technical Writing in Mathematics, Instructor Spring 2025
- MATH 2705W Technical Writing in Mathematics, Instructor Fall 2024
- MATH 2705W Technical Writing in Mathematics, Instructor Spring 2024
- MATH 1071Q Calculus for Business and Economics, Instructor Fall 2023
- UConn Algebra Prelim Tutor (hired by department) Summer 2023
- MATH 2210Q Applied Linear Algebra, Instructor Spring 2023
- UConn Algebra Prelim Tutor (hired by department) Winter 2022

- 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

- Problem Session Leader for the 2025 Preliminary Arizona Winter School (PAWS) on Mathematical cryptography and algorithms in number theory 9/22/25 – 11/21/25
- Project Assistant in the Arithmetic Geometry Workshop at the University of North Texas 5/5/25 – 5/9/25

University of Connecticut

- Directed Reading Program, mentor to Giancarlo Stabler (project on number theory and geometry) Fall 2024
- Directed Reading Program, mentor to Sarah Hocutt (project on mathematical cryptography) Spring 2023
- Directed Reading Program, mentor to Sierra Woods (project on elliptic curves) Spring 2022

INVITED CONFERENCE TALKS

- **Joint Mathematics Meetings (Washington D.C., MD) – Upcoming** 1/4/26 – 1/7/26
TBD - Talk
AMS Special Session on Algebraic and Analytic Aspects of Curves and L -functions
- **2025 AMS Fall Eastern Sectional Meeting (Virtual) – Upcoming** 10/25/25 – 10/26/25
Bounds for the relative class number problem for function fields - Talk
AMS Special Session on Unveiling Connections: Number Theory Meets Algebraic Geometry
- **LMFDB, Computation, and Number Theory (LuCaNT) 2025** 7/7/25 – 7/11/25
Families of modular curves in the LMFDB - Software Demo
Institute for Computational and Experimental Research in Mathematics (ICERM)
- **37th Automorphic Forms Workshop** 4/30/25 – 5/4/25
Abelian extensions arising from elliptic curves with complex multiplication - Talk
University of North Texas
- **2025 AMS Spring Eastern Sectional Meeting (Hartford, CT)** 4/5/25 – 4/6/25
Abelian extensions arising from elliptic curves with complex multiplication - Talk
AMS Special Session on Counting and Asymptotics in Number Theory
- **Simons Collaboration on Arithmetic Geometry, Number Theory, and Computation Annual Meeting** 1/15/25 – 1/16/25
Families of modular curves in the LMFDB - Lightning Talk
Simons Foundation
- **Joint Mathematics Meetings (Seattle, WA)** 1/8/25 – 1/11/25
Towards a classification of p^2 -discriminant ideal twins over number fields - Talk
AMS Special Session on Rethinking Number Theory
- **2024 AMS Fall Eastern Sectional Meeting (Albany, NY)** 10/19/24 – 10/20/24
Abelian extensions arising from elliptic curves with complex multiplication - Talk
AMS Special Session on Explicit Methods in Arithmetic Geometry
- **Palmetto Number Theory Series XXXVIII (PANTS 38)** 9/21/24 – 9/22/24
Abelian extensions arising from elliptic curves with complex multiplication - Talk
Wake Forest University
- **Sixteenth Algorithmic Number Theory Symposium (ANTS XVI)** 7/15/24 – 7/19/24
Abelian extensions arising from elliptic curves with complex multiplication - Lightning Talk
Massachusetts Institute of Technology (MIT)

- **The Mordell conjecture 100 years later** 7/8/24 – 7/12/24
Towards a classification of p^2 -discriminant ideal twins over number fields - Lightning Talk
Massachusetts Institute of Technology (MIT)
- **Maine-Quebec Number Theory Conference** 9/30/23 – 10/1/23
Elliptic curves with complex multiplication and abelian division fields - Talk
University of Maine
- **LMFDB, Computation, and Number Theory (LuCaNT) 2023** 7/10/23 – 7/14/23
Elliptic Curves with CM and Abelian Division Fields - Lightning Talk
Institute for Computational and Experimental Research in Mathematics (ICERM)
- **Joint Mathematics Meetings (Boston, MA)** 1/4/23 – 1/7/23
The Probability of Non-isomorphic Group Structures of Isogenous Elliptic Curves in Finite Field Extensions - Talk
AMS Special Session on Rethinking Number Theory II
- **Conférence de théorie des nombres Québec-Maine** 10/15/22 – 10/16/22
Computing the Proportion of Sneaky Primes for Pairs of Elliptic Curves - Talk
Université Laval
- **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, CO)** 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, MD)** 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

INVITED SEMINAR TALKS

- **Abelian extensions arising from elliptic curves with complex multiplication – Upcoming**
Dartmouth College Algebra and Number Theory Seminar TBD
- **Abelian extensions arising from elliptic curves with complex multiplication – Upcoming**
Oregon State University Algebra and Number Theory Seminar (online) TBD
- **Abelian extensions arising from elliptic curves with complex multiplication**
Wesleyan Algebra Seminar 4/18/25
- **Abelian extensions arising from elliptic curves with complex multiplication**
Kansas State University Number Theory Seminar (online) 2/12/25
- **Abelian extensions arising from elliptic curves with complex multiplication**
Louisiana State University Algebra and Number Theory Seminar 1/21/25

• Abelian extensions arising from elliptic curves with complex multiplication University of Minnesota Graduate Student Number Theory Seminar	12/10/24
• Abelian extensions arising from elliptic curves with complex multiplication University of Virginia Ramanujan-Serre Number Theory Seminar	12/6/24
• Abelian extensions arising from elliptic curves with complex multiplication CUNY Graduate Center Arithmetic Geometry Seminar	12/3/24
• Abelian extensions arising from elliptic curves with complex multiplication Ohio State University Number Theory Seminar	11/25/24
• Abelian extensions arising from elliptic curves with complex multiplication Cornell University Number Theory Seminar	11/15/24
• Elliptic curves with complex multiplication and abelian division fields Joint Columbia-CUNY-NYU Number Theory Seminar	3/7/24
• Elliptic curves with complex multiplication and abelian division fields Brown University Algebra/Number Theory Seminar	2/26/24
• Elliptic curves with complex multiplication and abelian division fields Greek Algebra & Number Theory Seminar (online)	2/19/24
• Elliptic curves with complex multiplication and abelian division fields University of Washington Number Theory Seminar	1/23/24
• Guest Lecture on complex multiplication and Galois representations Graduate Course on Elliptic Curves at Wake Forest University	11/20/23
• Computing the proportion of sneaky primes for pairs of elliptic curves with and without CM unQVNTS (Québec-Vermont Number Theory Seminar) at the University of Vermont	3/30/23
• Computing the proportion of sneaky primes for pairs of elliptic curves Oregon State University Number Theory Seminar (online)	10/18/22

LOCAL SEMINAR TALKS

University of Connecticut

• Opportunities at the NSA UConn Math Club	2/5/25
• How many ways can you sum $1 + 2 + \dots + n$? UConn Math Club	10/30/24
• Abelian Galois extensions and division points UConn S.I.G.M.A. Seminar	4/19/24
• Construction of elliptic curves with large rank UConn Number Theory Reading Group	2/29/24
• Linear congruences Undergraduate Course on Number Theory at UConn	2/20/24
• Elliptic curves with complex multiplication and abelian division fields UConn Algebra Seminar	1/17/24
• Introduction to Magma and Sage UConn Number Theory Reading Group	10/23/23
• Infinitude of the primes UConn Math Club	9/20/23
• Frequently asked questions on quant interviews UConn S.I.G.M.A. Seminar	9/15/23
• Sums of powers by L'Hopital's rule UConn Math Club	2/22/23

- **Computationally hard problems and their uses in cryptography: RSA and DLP**
UConn S.I.G.M.A. Seminar 2/17/23
- **Computing the genus of modular curves**
UConn Number Theory Reading Group 12/12/22
- **Creating a modular, inquiry-based modeling course**
UConn Math Teaching Workshop 12/9/22
- **Genus of a modular curve**
UConn Number Theory Reading Group 12/2/22
- **Computationally hard problems and their uses in cryptography**
UConn Math Club 10/5/22
- **Computing the proportion of sneaky primes for pairs of elliptic curves**
UConn S.I.G.M.A. Seminar 9/30/22
- **Computing the proportion of sneaky primes for pairs of elliptic curves**
UConn Algebra Seminar 9/14/22
- **Lubin-Tate formal group laws**
UConn Number Theory Reading Group 2/26/21

INSTRUCTIONAL SCHOOLS AND WORKSHOPS ATTENDED

- ***L*-functions and Modular Forms Database (LMFDB) Workshop at MIT** 7/14/25 – 7/18/25
This workshop is to encourage more people to get involved in developing the LMFDB. There were several tutorials and introductory talks, but most of the time was devoted to collaboration on development projects in small groups.
- **Algebraic Points on Curves at ICERM** 6/23/25 – 6/27/25
Project: Indices of Adelic images.
- **Arithmetic Geometry at the University of North Texas** 5/5/25 – 5/9/25
Project assistant for Abbey Bourdon: Modular curves and Galois representations.
- **Téoría de Números en las Américas 2** 9/8/24 – 9/13/24
Project: Lower bounds for relative class numbers of function fields.
- **Modular Curves Workshop 3 at MIT** 3/11/24 – 3/15/24
This conference is an activity of the Simons Collaboration in Arithmetic Geometry, Number Theory, and Computation. I helped compute models of universal elliptic curves and created family pages for modular curves.
- **Arizona Winter School (AWS)** 3/2/24 – 3/6/24
Topic: Abelian Varieties. Project group (Joseph Silverman): Canonical heights on abelian varieties.
- **Sage Days at the Center for Communications Research, La Jolla (CCR-L)** 2/5/24 – 2/9/24
Worked on SageMath development: edited source code and fixed issues posted on GitHub.
- **Preliminary Arizona Winter School (PAWS)** 10/2/23 – 11/10/23
PAWS is a virtual program on topics related to the upcoming AWS. Topic: Elliptic Curves and Abelian Varieties.
- **Statistiques Arithmétiques** 5/15/23 – 5/19/23
Conference on Arithmetic Statistics in CIRM, France.
- **École de printemps en statistiques arithmétiques** 5/8/23 – 5/12/23
Research school on Arithmetic Statistics in CIRM, France. Courses on Galois representations and statistics, complex multiplication, class field theory, and Frobenius distributions.
- **Women In Numbers 6 (WIN6)** 3/26/23 – 3/31/23
Project: Isogenous discriminant twins over number fields.
- **Arizona Winter School (AWS)** 3/4/23 – 3/8/23
Topic: Unlikely Intersections. Study group: Special point problems and their arithmetic.
- **Symposium sur la géométrie arithmétique et ses applications (SAGA)** 1/30/23 – 2/3/23
Research school: Introduction to SAGA in CIRM, France. Courses on Galois representations and modular forms, modularity and diophantine applications, local-global principles, and Jacobians and models of curves.

- **Preliminary Arizona Winter School (PAWS)** 10/3/22 – 11/11/22
PAWS is a virtual program on topics related to the upcoming AWS. Topic: Heights in Diophantine geometry.
- **PCMI Graduate Summer School, Utah** 7/17/22 – 8/6/22
Park City Mathematics Institute (PCMI) Graduate Summer School in Number Theory Informed by Computation.
- **Rethinking Number Theory 3 (RNT3)** 6/20/22 – 7/1/22
Virtual workshop. Project on computing the proportion of sneaky primes for pairs of elliptic curves.
- **Connecticut Summer School in Number Theory (CTNT)** 6/6/22 – 6/12/22
Courses on algebraic number theory, local fields, introduction to Galois theory, and the Chebotarev density theorem.
- **PCMI Graduate Summer School (Virtual)** 7/26/21 – 7/30/21
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.
- **Connecticut Summer School in Number Theory (CTNT)** 6/8/20 – 6/12/20
Virtual courses on sieves, infinite Galois theory, computations in number theory research, curves over finite fields, and p -adic functions on \mathbb{Z}_p .

SUMMER RESEARCH PROGRAMS

- **Number Theory REU at Texas A&M University**, *Advisor: Riad Masri* Summer 2019
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* Summer 2018
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

- **MathSciNet**, Reviewer Fall 2024 – Present
- **UConn Algebra Seminar**, Co-organizer Fall 2024 – Spring 2025
Invited speakers to UConn's algebra seminar and helped schedule and accommodate them.
- **MATHCOUNTS Eastern Chapter Competition**, Grader 2/17/24
MATHCOUNTS is a high school coaching and competition program that brings to math achievement the same enthusiasm and prestige enjoyed by athletics.
- **UConn AMS Integration Bee for Undergraduates**, Judge 11/17/22
An integration bee is like a spelling bee, but students take turns computing integrals instead of spelling words.
- **Mathematics Continued Conference (MCC)**, Organizer 10/22/22
The MCC at UConn is aimed at undergraduates to give them a glimpse of what grad school and math research is like.
- **Connecticut Summer School in Number Theory (CTNT)**, Assistant 6/6/22 – 6/12/22
Participated in and helped the organizers run both the summer school and conference.

PROFESSIONAL ACTIVITIES

- **The academic job market (panelist)**, 37th Automorphic Forms Workshop 5/1/25
- **Math and Society (panelist)**, High School for Math, Science, and Engineering at CCNY 10/25/23
- **Bridging the Knowledge Gap in Math (panelist)**, Wiley 10/25/23
- **Graduate school panel (moderator)**, Mathematics Continued Conference 10/22/22
- **Successful Baruch Alumni Panel (panelist)**, Baruch College 11/9/21

- **Graduate school panel (panelist)**, Mathematics Continued Conference 10/23/21
- **Preparing for graduate school (panelist)**, UConn Math Club 4/21/21
- **Undergraduate math experience (panelist)**, Baruch Math Club 3/26/21
- **Undergraduate math research (panelist)**, UConn Math Club 11/11/20

CLUBS/LEADERSHIP

- **Computational Number Theory Reading Group at MIT (online):** Member Spring 2025
We read various papers relating to computational number theory and discuss methods used and research problems.
- **UConn Number Theory Reading Group (NTRG):** Member Summer 2020 – Fall 2024
We study various topics related to number theory. We studied p -adic analysis, local class field theory, units of totally real cubic number fields, modular forms and modular curves, computing ranks of elliptic curves, and Tate's thesis.
- **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, 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 – beginner

COMPUTER SKILLS

- Magma
- SageMath
- Mathematica
- C++, Java, and Python