Dylan Costa

RESEARCH INTERESTS

My research interests are in Algebraic Number Theory and Arithmetic Geometry. Specifically, my interests surround the topics of elliptic curves, modular curves, and Galois representations attached to abelian varieties.

EDUCATION

2021 - present	University of Connecticut, Ph.D in Mathematics Research Advisor: Alvaro Lozano-Robledo	(GPA: 3.8/4.0)
2017 - 2021	Ithaca College, BA in Mathematics with Honors Research Advisors: Emilie Wiesner, Ted Galanthay	(GPA: 3.97/4.0)
Invited Talks		
Rank Growth of Elliptic Curves over Quadratic Extensions Graduate Research Forum, University of Connecticut January 2025		
On ℓ -adic Images of Galois Attached to Elliptic Curves over the Rationals General Exam Presentation, University of Connecticut		November 2024
On The Euclidean Embedding and Adeles/Ideles of a Number Field Number Theory Seminar, University of Connecticut October 2024		
Construction of High Rank Elliptic Curves over Quadratic Fields Number Theory Seminar, University of Connecticut		April 2024
Elliptic Curves Mathematics C	March 2024	
On Meromorphic Differentials and Riemann-Roch Number Theory Seminar, University of Connecticut		April 2023
TEACHING	G Experience	

MATH 1071: Calculus for Business and Economics	
Spring 2025, Spring 2024, Fall 2023	Instructor of Record
MATH 2110: Multivariable Calculus	

Summer 2024, Fall 2024 Graduate Teaching Assistant

MATH 1132: Calculus II Spring 2023, Summer 2023, Fall 2022, Summer 2022, Spring 2022 Graduate Teaching Assistant

MATH 1071: Calculus I Fall 2021 Graduate Teaching Assistant

RELEVANT SKILLS

Programming MAGMA, SAGE, Java (advanced), Python, MATLAB (intermediate), HTML

(novice)

Software Latex, Office Programs (Excel), Google Programs (Sheets)

Last updated: February 16, 2025