Zachary Gardner

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(214) 493-7284
U.S. Citizen

Education

Boston College 2020-2026
Ph.D. in Mathematics *Advised by Keerthi Madapusi*

University of Texas at Austin 2016-2020
B.S. in Mathematics with Departmental Honors *Advised by Sam Raskin*

Preprints

An algebraicity conjecture of Drinfeld and the moduli of p-divisible groups, joint with K. Madapusi. 2024.
Prismatic Rapoport-Zink spaces associated to general linear groups. (*forthcoming*)
Moduli of $\mathcal{O}$-prismatic $(\mathcal{G}, \mu)$-apertures and applications. (*forthcoming*)

Research Talks

Prismatic Rapoport-Zink spaces associated to general linear groups, Kyoto University, October 27, 2024
Moduli of prismatic $(\mathcal{G}, \mu)$-apertures and applications, The University of Tokyo, October 9, 2024
Prismatic $(\mathcal{G}, \mu)$-apertures and 1-bounded derived stacks, Universität Münster, August 14, 2024
Moduli of prismatic $(\mathcal{G}, \mu)$-apertures, Universität Münster, August 7, 2024

Service

Seminars Organized

Derived Arithmetic Intersection Theory (DAIT) Learning Group Spring-Summer 2022
K-Theory and Differential Cohomology Learning Group Spring 2022
Derived Algebraic Geometry (DAG) Learning Group Fall 2021
Galois Representations Reading Group Summer 2021
UT Summer Minicourses Summer 2020

Other Service

Treasurer: Math Graduate Student Association Fall 2022–
Managed finances, secured funding for events and standard activities
Secretary: Math Graduate Student Association Fall 2021-Spring 2022
Co-organized GIST, helped with prospective student logistics, and managed internal communications
Counselor: Ross Mathematics Program Summer 2017 & 2019
Mentored students, trained other counselors, taught courses, and helped with administration

Teaching Experience

Boston College

Teaching fellow for Math 1100 Calculus I	Spring 2024
Teaching fellow for Math 1004 Finite Probability and Applications	Fall 2023
Teaching fellow for Math 1100 Calculus I	Fall 2022
Teaching assistant for Math 1101 Calculus II	Spring 2022
Teaching assistant for Math 2202 Multivariable Calculus	Fall 2021
Grader for Math 3312 Algebra II	Spring 2021
Teaching assistant for Math 1102 Calculus I (Math/Sci)	Fall 2020

University of Texas at Austin

UT Summer Minicourses

Taught one-week course titled "Abelian Varieties and the Mordell-Weil Theorem"	Summer 2020
Taught one-week course titled "Class Field Theory"	Summer 2019

Scholarships, Honors, & Awards

Boston College

Donald J. White Teaching Excellence Award	Spring 2022

Conferences & Workshops Attended

Summer Research Institute in Algebraic Geometry	July 28-August 1, 2025
Colorado State University, Fort Collins, Colorado, USA	
Workshop on Shimura varieties and related moduli stacks	October 27, 2024
Kyoto University, Kyoto, Japan	
p**-adic cohomology and arithmetic geometry (***in honor of Nobuo Tsuzuki***)**	October 21-25, 2024
Tohoku University, Sendai, Japan	
Workshop on Shimura varieties, representation theory and related topics	October 7-11, 2024
The University of Tokyo, Tokyo, Japan	
Young Topologists Meeting	August 5-9, 2024
Universität Münster, Münster, Germany	
Algebraic geometry and cohomology in mixed characteristic	May 15-19, 2023
Evanston, Illinois, USA	
Homotopy Theory with Applications to Arithmetic and Geometry	June 27-30, 2022
Fields Institute, Toronto, Ontario, Canada	
Arizona Winter School on Topology and Arithmetic	March 2-6, 2019
Southwest Center for Arithmetic Geometry, Tucson, Arizona, USA	

Languages

English	Native
Hindi	Intermediate
French	Beginner