

Fangu Chen

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Department of Mathematics

University of California, Berkeley

Evans Hall, Berkeley, CA 94720

EDUCATION

University of California, Berkeley

Ph.D. in Mathematics

Advisor: Yunqing Tang

Expected May 2026

University of Michigan, Ann Arbor

B.S. in Mathematics

2021

University of Michigan - Shanghai Jiao Tong University Joint Institute

B.S. in Electrical and Computer Engineering

2021

PUBLICATIONS AND PREPRINTS

- Infinitely many supersingular primes for some Mumford's abelian fourfolds. arXiv:2511.06654.
- Superspecial primes for QM abelian surfaces over real number fields. arXiv:2511.07814.
- Determining optimal test functions for 2-level densities, with Elżbieta Bołdyrew, Charles Devlin VI, Steven J. Miller, and Jason Zhao, *Research in Number Theory*, 9 (2023), no. 2.
- The limiting spectral measure for an ensemble of generalized checkerboard matrices, with Yuxin Lin, Steven J. Miller, and Jiahui Yu, *The PUMP Journal of Undergraduate Research*, 4 (2021), 202–221.

INVITED TALKS

- Zhejiang University, Number Theory Seminar, December 2025
- Boston University, Number Theory Seminar, December 2025
- Shanghai Institute for Mathematics and Interdisciplinary Sciences, Workshop: p-curvatures, October 2025
- AMS Special Session (Hodge theory, algebraic cycles, and arithmetic), St. Louis, October 2025
- University of Michigan, Ann Arbor, GLNT Seminar, October 2025

TEACHING EXPERIENCE

University of California, Berkeley

Graduate Student Instructor

Math 56 (Linear Algebra)

Fall 2024

Math 16A (Analytic Geometry and Calculus)

Fall 2023

Math 54 (Linear Algebra and Differential Equations)

Spring 2023

Math 91 (Special Topics in Mathematics Linear Algebra)	Fall 2022
Math 53 (Multivariable Calculus)	Spring 2022
Math 10A (Methods of Mathematics: Calculus, Statistics, and Combinatorics)	Fall 2021
Math REU Mentor proposed and supervised research project in Diophantine geometry for three undergraduate students; students completed a research paper	Summer 2025
University of Michigan, Ann Arbor	
Course Assistant	
Math 396 (Honors Analysis II)	Winter 2021
Math 395 (Honors Analysis I)	Fall 2020
Math Lab Tutor	Winter 2020
Preliminary Arizona Winter School	
Elliptic Curves and Abelian Varieties, Problem Session Leader	Fall 2023

HONORS AND AWARDS

- Lehmer Fellowship in Number Theory
graduate fellowship at UC Berkeley Spring 2024
- Stephen Smale Award in Mathematical Sciences
awarded by the LSA Honors Program at the University of Michigan 2021
- Outstanding Graduating Senior Award
departmental award to graduating students who have shown the highest level of academic excellence in mathematics at the University of Michigan 2021
- Wirt and Mary Cornwell Prize
departmental award to a student at the University of Michigan who has demonstrated the greatest intellectual curiosity and given the most promise of original study and creative work 2021
- William Leveque Award in Number Theory
departmental award to an undergraduate who excels in the study of number theory at the University of Michigan 2020