

Kenneth Blakey

✉ kblakey@mit.edu
🌐 kenneth-blakey.com

Employment

- 2019 – 2019 Barista, Starbucks
- 2017 – 2017 Delivery Driver, I ♥ NY Pizza

Education

- 2023 – 2028* Ph.D. Pure Mathematics, Massachusetts Institute of Technology
Advisor: Paul Seidel
- 2019 – 2023 Sc.B. Pure Mathematics w/ Honors, Brown University
Advisor: Tom Goodwillie
- 2015 – 2019 High School Diploma, Pine Ridge High School
Valedictorian, summa cum laude, distinguished scholar award, merit scholar designation, hall of fame recipient

Research visits

- 2024 – 2024 Nonlinear group at MPI MiS Leipzig

Preprints

- 2024 *Augmentation varieties and disk potentials III*, arXiv:2401.13024, with S. Chanda, Y. Sun, C. Woodward
- 2024 *Augmentation varieties and disk potentials II*, arXiv:2401.13021, with S. Chanda, Y. Sun, C. Woodward
- 2024 *Augmentation varieties and disk potentials I*, arXiv:2310.17821, submitted, with S. Chanda, Y. Sun, C. Woodward
- 2022 *Stable Morse flow trees*, arXiv:2207.00653, submitted

Invited seminar talks

- 2024 MPI MiS Leipzig geometry seminar
- 2023 Brown University geometry and topology seminar
- 2023 MIT symplectic seminar
- 2022 Brown University mathematics graduate student seminar

Invited conference talks

- 2024 AMS New England graduate student conference
- 2022 AMS New England graduate student conference

Others talks and presentations

- 2024 MIT Kan seminar: basics of K-theory
- 2024 MIT Kan seminar: Bott periodicity and Fredholm operators
- 2024 MIT Kan seminar: introduction to Floer homotopy theory
- 2023 CAARMS poster session
- 2023 Brown University MATH 2720O lecture: the triangulation conjecture and Floer homotopy theory
- 2022 Brown University mathematics undergraduate colloquium
- 2022 Brown University MATH 2720U lecture: Hamiltonian periodic Floer homology
- 2021 DIMACS REU end of program presentation
- 2019 Brown University mathematics DRP end of program presentation

Awards and honors

- 2023 Brown University David Howell premium for excellence in mathematics and natural philosophy
- 2023 CAARMS Angela E. Grant poster presentation award - "best theory"
- 2023 NSF graduate research fellowship
- 2023 Stanford Knights Hennessy fellowship (awarded, declined)
- 2023 Stanford EDGE fellowship (awarded, declined)
- 2022 Barry Goldwater scholarship
- 2019 Brown University presidential scholarship
- 2019 Daytona Beach News Journal medallion of excellence
- 2019 The Gates Scholarship

Teaching

Brown University

- 2023 MATH 1140: Functions of several variables, undergraduate TA
- 2022 MATH 1140: Functions of several variables, undergraduate TA
- 2022 MATH 1410: Topology, undergraduate TA
- 2021 MATH 1410: Topology, undergraduate TA

Advising

Undergraduate students

- 2024 Ariff Johan, MIT-Imperial summer research exchange

Programs participated

- 2024 2nd Simons mathematics summer workshop: Moduli
- 2024 Kylerec: Recent developments in Gromov–Witten theory
- 2024 Positive geometry in particle physics and cosmology

- 2024 Rutgers symplectic summer school
- 2024 Symplectic geometry of representation and quiver varieties
- 2021 DIMACS REU
- 2019 Brown University mathematics DRP

Programs organized

- 2024 Reading seminar on Floer homotopy I

Service to the community

- 2024 Brown University Black alumni outreach
- 2024 MIT undergraduate mathematics association coffee chats
- 2023 MIT undergraduate mathematics association coffee chats
- 2023 The Gates Scholarship summer institute squad leader
- 2022 Brown University mathematics TA orientation panelist
- 2021 Sprout and STEM mentor
- 2021 Sprout and STEM tutor