

ONYX GAUTAM

onyxg@princeton.edu

EDUCATION

PhD in Mathematics, Princeton University

Fall 2023–present

B.S. in Mathematics with honors, Stanford University

Fall 2019–Spring 2023

RESEARCH

Late-time tails and mass inflation for the spherically symmetric Einstein–Maxwell–scalar field system (2024)

arXiv:2412.17927

CONTRIBUTED TALKS

Mass Inflation in General Relativity

July 7, 2024

Spectra Survey of Mathematics Conference

Establishing decay results that imply mass inflation for spherically symmetric charged black holes.

TEACHING AND GRADING

Grader

April 2020–December 2022

Stanford University Math Department

Graded classes in complex analysis (Math 116), abstract algebra (Math 120), and representation theory (Math 122), as well as honors sequence in analysis and linear algebra (Math 61CM, 62CM, 63CM).

Teaching Assistant

March 2020–December 2022

Euler Circle

Give one-on-one feedback to high-school students in college-level classes taught by Simon Rubenstein-Salzedo. Classes TAed: complex analysis (20 weeks), abstract algebra (group and Galois theory), introduction to proofs in number theory (twice).

AWARDS AND HONOURS

NSF Graduate Research Fellowship

2023

Centennial Fellowship in the Natural Sciences and Engineering, Princeton University

2023

Kennedy Thesis Prize, for top undergraduate honors thesis in natural sciences, Stanford University

2023

J. E. Wallace Sterling Award, for top 25 students in humanities and sciences, Stanford University

2023