

Justin Toyota

jtoyota@utexas.edu

EDUCATION

University of Texas at Austin

Pursuing: Ph.D. Mathematics

Advisor: Nataša Pavlović

Austin, TX

2023–Present

California Institute of Technology

B.S. Mathematics

Pasadena, CA

2019–2023

PAPERS

M. P. Gualdani, N. Pavlović, J. Toyota, D. Wynter, “From the quantum Boltzmann operator to the quantum Landau operator”, 2025. arXiv:2511.19823

TEACHING

Teaching Assistant

Fall 2026	Real Analysis (M381C)	UT Austin
Spring 2026	Sequences, Series, and Multivariable Calculus (M408D)	UT Austin
Spring 2024	Matrices and Matrix Calculations (M 340L)	UT Austin
Fall 2023	Differential and Integral Calculus (M 408C)	UT Austin
Summer 2021	Introduction to Proofs (Ma 0)	Caltech

AWARDS

AIMS Student Paper Competition 2026, Second Place	2026
Frank Gerth III Graduate Excellence Award	2024

INVITED TALKS

15th AIMS Conference	July 2026
New Challenges in the Derivation and Dynamics of Many Body Systems (MIT)	May 2026

CONTRIBUTED TALKS

Joint Alabama-Florida Conference	May 2026
15th Ohio River Analysis Meeting	March 2026
UT Austin Junior Analysis Seminar	February 2026
21st Prairie Analysis Seminar (poster)	November 2025
UT Austin Junior Analysis Seminar	September 2025

UT Austin Junior Analysis Seminar	March 2025
UT Austin Junior Topology Seminar	November 2024
UT Austin Junior Analysis Seminar	September 2024
UT Austin Junior Topology Seminar	March 2024
UT Austin Junior Analysis Seminar	February 2024
UT Austin Junior Analysis Seminar	September 2023
Caltech SFP/SURF Fall Seminar	October 2022
Caltech SFP/SURF Fall Seminar	October 2021
Caltech SFP/SURF Fall Seminar	October 2020

SERVICE AND OUTREACH

Volunteer at MATH for All in Austin	2025–2026
Volunteer at UT Austin STEM Girl Day	February 2025
Introductory math talk at Liberal Arts and Science Academy, Austin	April 2025
Member of UT Austin Graduate Student Assembly	2024–2025
Member of UT Austin Math Graduate Representative Committee	2024–2025
Volunteer and Speaker at UT Austin Sunday Morning Math Group	2023–Present
Mentor for UT Austin Directed Reading Program	2023–Present
Organizer for UT Austin Sophex Seminar	2023–2024
Article on Emmy Noether for <i>A World of Women in STEM</i> https://www.wowstem.org/post/emmy-noether	March 2022
President of Caltech Math Club	2021–2023
Volunteer for math competition preparation	2021–2023
Proctor for AMC 10/12 and AIME	2021–Present
Problem writer, proctor, and grader for Caltech–Harvey Mudd Math Competition	2019–2021