Matthew Kroesche

Texas A&M University
Department of Mathematics

Personal Information

Email Address:	mdkroesche@tamu.edu
URL:	https://hukilau17.github.io/
Office:	Blocker 640D

Education

August 2019 - August 2024 (expected): Ph.D in Mathematics,
Texas A&M University, College Station
Advisor: Dr. Matthew Young

August 2015 - May 2019: B.S. in Electrical Engineering and Applied Mathematics,
Texas A&M University, College Station

Research Interests

Analytic number theory, L-functions, modular forms

Teaching Experience

August 2023 - December 2023	Instructor of Record, MATH 167 - Explorations in Math
June 2023 - August 2023	TA for Texas A&M Number Theory REU Program
January 2023 - May 2023	Instructor of Record, MATH 168 - Finite Mathematics
June 2022 - August 2022	Recitation/Python Lab TA, MATH 151 - Engineering Calculus I
	Writer for Python lab assignments for all summer sections of MATH 151
January 2022 - May 2022	Recitation/Python Lab TA, MATH 151 - Engineering Calculus I
August 2021 - December 2021	Recitation/Python Lab TA, MATH 151 - Engineering Calculus I
June 2021 - August 2021	Recitation/Python Lab TA, MATH 152 - Engineering Calculus II
	Writer for Python lab assignments for all summer sections of MATH 152
January 2021 - May 2021	Recitation/Python Lab TA, MATH 152 - Engineering Calculus II
August 2020 - December 2020	Recitation/Python Lab TA, MATH 150 - Precalculus
August 2017 - present	Instructor, Spider Smart/E^3 Learning Center, College Station

Conferences Attended

January 2024 (upcoming)	Joint Mathematics Meetings, San Francisco, CA
March 2023	Southern Regional Number Theory Conference, Baton Rouge, LA
January 2023	Joint Mathematics Meetings, Boston, MA
March 2022	Southern Regional Number Theory Conference, Baton Rouge, LA

Talks Given

November 2023 (upcoming)	UT Tyler Number Theory and Combinatorics Seminar, Tyler, TX (via Zoom)
April 2023	Texas A&M Number Theory Seminar, College Station, TX
March 2023	Southern Regional Number Theory Conference, Baton Rouge, LA

Preprints

Low-Lying Zeros of a Thin Family of Automorphic L-Functions in the Level Aspect

Toward Ph.D. thesis, Texas A&M University

`https://arxiv.org/abs/2308.06359`

Outreach

January 2021 - November 2023	MATHCOUNTS Question Writing Committee member
November 2018 - present	Coach for the Texas Harvard-MIT Math Tournament teams
June 2016 - present	Coach for the Texas American Regions Math League teams
June 2019	Counselor, Summer Math Research Training Camp, Texas A&M
October 2015 - October 2018	Volunteer for the Texas A&M High School Mathematics Contest

Honors and Achievements

2020 - 2023	N.W. Naugle Fellowship in Mathematics
May 2019	Graduated Texas A&M *summa cum laude*
December 2018	Putnam examination, top 200
December 2017	Putnam examination, top 500
December 2016	Putnam examination, top 200
December 2015	Putnam examination, top 500
May 2015	Texas ARML Team High Scorer
April 2015	USA Mathematical Olympiad qualifier
April 2014	USA Mathematical Olympiad qualifier

Skills

Python, C/C++, LaTeX