

JARED KRANDEL

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CURRENT POSITION

Krener Assistant Professor, University of California, Davis

Winter 2025 - Present

PREVIOUS POSITIONS

Postdoctoral Researcher - Complementary program member, SLMATH

Fall 2024

EDUCATION

Ph.D. in Mathematics, Stony Brook University

August 2019 - May 2024

Advisor: Raanan Schul

B.S. in Mathematics, University of Illinois Urbana-Champaign

August 2016 - May 2019

Summa Cum Laude, Highest Distinction

H. Roy Brahana Prize - Most exceptional undergraduate mathematics career

B.S. in Physics, University of Illinois Urbana-Champaign

August 2016 - May 2019

Summa Cum Laude, Highest Distinction

RESEARCH INTERESTS

Quantitative Geometric Measure Theory - Analyst's traveling salesman problems, quantitative analysis of Lipschitz maps, the big pieces operator in Euclidean and metric spaces, Reifenberg parameterization, local bi-Lipschitz embeddings of rough spaces, uniform rectifiability.

RESEARCH PAPERS

Published / Accepted

1. Jared Krandel. [The Traveling Salesman Theorem for Jordan Curves in Hilbert Space](#). *Michigan Math Journal*. 75 (3) 471 - 543, July 2025. arXiv: [2107.07017](#)
2. Jared Krandel and Raanan Schul. [Iterating the Big-Pieces operator and larger sets](#). *Bull. London Math. Soc.*, 54: 2151-2161, 2022. arXiv: [2108.01581](#)
3. Jared Krandel. [Lipschitz decompositions of domains with bilaterally flat boundaries](#). *Journal of the London Mathematical Society.*, 111: e70128, 2025. arXiv: [2208.06740](#)

Preprints

1. Jared Krandel and Paul Sweeney. A smooth intrinsic flat limit with negative curvature. arXiv: [2406.15332](#), 2024.
2. Jared Krandel. Weak Carleson conditions in uniformly rectifiable metric spaces: the WCD and alpha numbers. arXiv: [2403.14479](#), 2024.

RESEARCH TALKS

Research and Reading Groups in Analysis

Lightning talk and reading group talk

August 2025

Simons-Laufer Mathematical Sciences Institute

GMT and Minimal Submanifolds seminar.

December 2024

University of California, Davis

Geometry/Topology seminar.

October 2024

2024 Fall Eastern AMS Sectional Special Session on Nonsmooth Analysis and Geometry Invited talk.	October 2024
Geometry of Measures and Free Boundaries; a Conference in Honor of Tatiana Toro Invited short talk. Seattle, Washington	July 2024
University of Warwick Invited short talk. GMT Seminar.	July 2024
University of Fribourg One-day minicourse: Lectures on uniformly rectifiable metric spaces	June 2024
University of Tennessee Analysis Seminar	March 2024
HAPDEGMT Bilbao Contributed short talk. Bilbao, Spain	June 2023
University of Washington Rainwater Seminar	May 2023
University of Minnesota Analysis and PDE seminar	March 2023
Workshop in Analysis and Probability - Concentration Week on Geometry and Analysis on Nonsmooth Spaces Invited short talk. Texas A&M University	August 2022
The University of Connecticut Probability and Analysis Seminar	October 2021
Stony Brook University Stony Brook Analysis Seminar	September 2021

INVITED RESEARCH VISITS

University of Connecticut Two weeks under the supervision of Professor Matthew Badger	April 2023
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CONFERENCES ATTENDED

Research and Reading Groups in Analysis University of Pennsylvania	August 2025
Analysis and PDE in Montana Montana State University	May 2025
Geometry of Measures and Free Boundaries; a Conference in Honor of Tatiana Toro University of Washington	July 2024
2024 Fall Eastern AMS Sectional Meeting University of Albany	October 2024
Quasiworld Workshop Helsinki, Finland	August 2023
HAPDEGMT Bilbao Bilbao, Spain	June 2023
Workshop in Analysis and Probability - Concentration Week on Geometry and Analysis on Nonsmooth Spaces Texas A&M University	August 2022

TEACHING, MENTORING, AND SERVICE

Krener Assistant Professor, University of California, Davis	Winter 2025 - Present
MAT 127B: Real Analysis	Winter 2025
Teaching Assistant, Stony Brook University	Fall 2019 - Spring 2024
Foundations of Analysis	Spring 2024
Applied Algebra	Fall 2022
Calculus III with Applications	Spring 2022
Calculus II	Fall 2021
Multivariable Calculus with Linear Algebra	Fall 2020
Differential Equations with Linear Algebra	Spring 2020
Calculus A	Fall 2019
DRP Mentor, Stony Brook University	Spring 2024
Met weekly with an undergraduate student working through Lawler's <i>Random Walk and the Heat Equation</i> . Advised on a final presentation concisely explaining random walks and martingales.	
Journal Reviewer for...	
• Analysis and Geometry in Metric Spaces	

TECHNICAL SKILLS

LaTeX, Python (numpy, pandas, scikit-learn, pytorch), basic C++.

ADDITIONAL INFO

Citizenship: USA
Languages: Native English, Basic written French