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This file was last updated in August 2025. Please see my website for the most current version.

Appointments

- 2025-2027 **Postdoctoral Associate.** [Department of Mathematics](#), College of Science, Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA.
- 2023-2025 **Postdoctoral Scholar, Research.** [Department of Mathematics](#), College of Arts and Science, Vanderbilt University, Nashville, TN.

Education

- 2023 **PhD** in Mathematics. [School of Mathematics](#), College of Sciences, Georgia Institute of Technology, Atlanta, GA.
Thesis: “**Improving and maximal inequalities in discrete harmonic analysis**” ([pdf](#)).
Advisor: [Michael Lacey](#)
Committee: Chris Heil, Ben Krause, Doron Lubinsky, Shahaf Nitzan.
- 2022 **MS** in Mathematics. [School of Mathematics](#), College of Sciences, Georgia Institute of Technology, Atlanta, GA.
- 2017 **MS** in Pure Mathematics. [Department of Mathematics](#), Faculty of Sciences, Aristotle University of Thessaloniki, Greece.
“**The reflection principle on the hyperbolic plane**” ([pdf in Greek](#)).
Advisor: [Dimitrios Betsakos](#)
- 2015 **BS** in Mathematics. [Department of Mathematics](#), Faculty of Sciences, Aristotle University of Thessaloniki, Greece.

Papers & Preprints

6. (in preparation) **Two parameter commutators and product BMO: Dyadic case**, with Komla Domelevo, Michael T. Lacey, Jill Pipher, Yumeng Ou, Stefanie Petermichl, and Brett Wick.
5. **Averages with the Gaussian divisor: Weighted Inequalities and the Pointwise Ergodic Theorem** (2024), with Naz Miheisi and Hamed Mousavi. [arXiv](#)
4. **Gaussian Integers: Improving inequalities for primes and the Goldbach Conjecture** (2023), with Ben Krause, Michael T. Lacey, Hamed Mousavi, and Yaghoub Rahimi. [arXiv](#) (submitted)

3. **A lower estimate on the square function of an indicator set** (2022), with Michael T. Lacey, [arXiv](#) (to appear in Proceedings of the AMS)
2. **Improving and maximal inequalities for primes in progressions** (2021), with Michael T. Lacey, Hamed Mousavi, and Yaghoub Rahimi. [arXiv](#) (Banach J. Math. Anal. (2022) <https://doi.org/10.1007/s43037-022-00191-9>)
1. **Averaging with the divisor function: ℓ^p -improving and sparse bounds** (2021), [arXiv](#) (Rocky Mountain Journal of Mathematics, (2022) <https://doi.org/10.1216/rmj.2022.52.2027>)

Journals Refereed

- **Transactions of the American Mathematical Society** (Fall 2024)
- **Online Journal of Analytic Combinatorics** (Spring 2024)
- **Journal of Mathematical Analysis and Applications** (Spring 2023)

Academic Awards

- **Festa Fellowship** 2020. A School of Mathematics award for superior academic and leadership skills, Georgia Institute of Technology
- **3rd place Admission Award** (2011), from the Greek National Scholarship Foundation.

Teaching & Service Awards

- **Shanks Postdoctoral Award for Teaching Excellence.** (Spring 2024)
Second out of two awards given. Vanderbilt University
- **Graduate Community Award.** A one-time-only School of Mathematics Award created to acknowledge extraordinary service to the department and the graduate program, Georgia Institute of Technology
- **Thank a Teacher Award** (Fall 2022), Center for Teaching and Learning, Georgia Institute of Technology
- **Graduate Student Instructor of the Year Award** 2021 - 2022, Georgia Institute of Technology, School of Math
- **Outstanding Online Graduate Student Instructor Award** 2020 - 2021, Georgia Institute of Technology, School of Math
- **Outstanding TA Award** 2021, Georgia Institute of Technology, School of Math

- **Graduate TA Recognition** 2019 - 2020, Georgia Institute of Technology, School of Mathematics.
- **Thank a Teacher Award** (Fall 2019), Center for Teaching and Learning, Georgia Institute of Technology

Teaching

INSTRUCTOR: **Preparation for Calculus**, MATH 1214
 VIRGINIA TECH Fall 2025 (one section)

INSTRUCTOR: **Survey of Calculus**, MATH 1100
 VANDERBILT Fall 2024 (section 1, section 2)
Multivariable Calculus, MATH 2300
 Fall 2023 (section 12), Spring 2024 (section 1), Summer 2024 (section 1)
Methods of Linear Algebra, MATH 2410
 Fall 2023 (section 4)

INSTRUCTOR: **Probability & Statistics**, MATH 3215
 GEORGIA TECH Fall 2022 (L), Spring 2020 (N: online for the second half of the semester)
Linear Algebra, MATH 1554
 Summer 2022 (A: hybrid course - split instruction)
Survey of Calculus, MATH 1712
 Summer 2019 (A)
Finite Math, MATH 1711
 Summer 2020 (A: online course), Spring 2023 (G)

TEACHING **MS Analytics Boot Camp** for the College of Computing. Summer 2021
 ASSISTANT: **Differential Equations**, MATH 2552. Summer 2018 (A1 & SOUP*)
 GEORGIA TECH **Integral Calculus**, MATH 1552. Fall 2017 (A1)
Survey of Calculus, MATH 1712. Fall 2019 (D3 & D4), Fall 2018 (B1 & D1)

*SOUP = Summer Online Undergraduate Program

Worked/working as a Research Assistant at Georgia Institute of Technology instead of teaching during:
 Spring 2018, Spring 2019, Fall 2020, Spring 2021, Fall 2021, Spring 2022, Summer 2022, Summer 2023.
 Supporting grants by the US National Science Foundation: DMS-1600693, DMS-1949206, DMS-2247254.

Mentoring

UNDERGRADUATE Yichi (Isabel) Liu, Vanderbilt University.

STUDENTS Spring 2024 - Spring 2025

UNDERGRADUATE **Atlanta Undergraduate Research Mathematics Seminar** ([AURMS](#)), Fall

PROGRAMS 2022, Spring 2023 (undergraduate student mentoring)

Directed Reading Program at Georgia Institute of Technology, School of Mathematics. (*Mathematics of Machine Learning*) Spring 2021, (*Ergodic Theory and Applications in Dynamical systems*) Fall 2020

OTHER **Peer Graduate Student Mentoring Initiative**, Georgia Institute of Technology, School of Mathematics 2020 - 2023

Organizing

SPECIAL **Special Session on Recent Advances in Harmonic Analysis with**
SESSIONS **Applications to Discrete Analysis and Geometric Measure Theory** in the [2026 Joint Math Meetings](#), January 4-7, 2026, Washington, DC (co-organizer)

Special Session on Discrete Harmonic Analysis in the [2023 AWM Research Symposium](#), September 30 - October 2, 2023. Clark Atlanta University. (co-organizer)

SEMINARS **Computational Analysis Seminar**, Vanderbilt University, Department of Mathematics, Spring 2024 - Spring 2025

Atlanta Undergraduate Research Mathematics Seminar ([AURMS](#)), 2021 - 2022 (co-organizer)

Student Analysis Seminar, Georgia Institute of Technology, School of Mathematics, 2019 - 2020

OTHER **Peer Grad Mentoring Initiative**, Georgia Institute of Technology, School of Mathematics 2020 - 2023

Professional Service

AS A **Outreach Committee**, Department of Mathematics, Vanderbilt University.
POSTDOC Fall 2024 - today.

AS A **CoS Dean's Graduate Advisory Council**, Georgia Institute of Technology,
GRADUATE College of Sciences. Spring 2021 - Summer 2022

STUDENT **Graduate Student Council**, Georgia Institute of Technology, School of Mathematics Summer 2019 - Summer 2023

Graduate Student Orientation Week, Georgia Institute of Technology, School of Mathematics 2019, 2020, 2021

International Graduate Student Orientation Week, Georgia Institute of Technology, School of Mathematics 2019, 2020, 2021, 2022

Masters Student Orientation Day, Georgia Institute of Technology, School of Mathematics 2019

International Post-Doc Teaching Orientation Day, Georgia Institute of Technology, School of Mathematics 2019

VOLUNTEERING **Admitted Graduate Student Day presentation & panel**, Georgia Institute of Technology, School of Mathematics 2018, 2020, 2021, 2022

AWM Graduate School Recruiting panel, Georgia Institute of Technology, AWM Chapter, Spring 2021, Spring 2022

Graduate School panel for honor students, Georgia Institute of Technology, School of Mathematics Spring 2021

Prospective Graduate Student Day panel, Georgia Institute of Technology, School of Mathematics 2019, 2020, 2021, 2022

Welcome panel for Graduate Student Orientation, Georgia Institute of Technology, School of Mathematics 2018, 2019, 2020, 2021

Welcome panel for International Graduate Student Orientation, Georgia Institute of Technology, School of Mathematics 2018, 2019, 2020, 2021

Georgia Institute of Technology High School Math Competition 2018, 2019 (assisted with organization, proctoring, and grading)

Invited Talks - Conferences

- 2024 **Midwestern Workshop on Asymptotic Analysis**. [October 11 - 13, 2024](#). Indiana University in Bloomington, Indiana
- Pointwise Ergodic Theory & Connections II**. “[An ergodic theorem in the Gaussian setting](#)” Bristol University - Bristol, UK
- 2023 **Analysis Conference**, December 8-10. Georgia Institute of Technology, Atlanta, GA
- Pointwise Ergodic Theory & Connections**. “[Why should we care about averaging operators?](#)” King’s College - London, UK
- Clemson-GaTech Time-Frequency Meeting** Spring 2023, Clemson University, Clemson, South Carolina

- 2022 **2nd Symposium for the 100 years of the Hellenic Mathematical Society.** “Averaging with Primes in Progressions”, National Institute of Technology, Athens, Greece

Talks in Special Sessions

- 2025 (upcoming) **2025 Fall AMS Central Sectional Meeting.** “Special Session: Harmonic Analysis and Partial Differential Equations,” [October 18-19, 2025](#). Saint Louis University, St. Louis, MO.
- (upcoming) **2025 Fall AMS Southeastern Sectional Meeting.** “Special Session: Ergodic Theory and Discrete Analysis,” [October 3-5, 2025](#). Tulane University, New Orleans, LA.
- Mathematical Congress of the Americas.** “Special Session: Harmonic Analysis and Partial Differential Equations” [July 21 - 25, 2025](#). Miami, FL
- Constructive Functions 2025, in conjunction with the 37th Shanks Lecture: Celebrating Ed Saff’s 80th birthday.** [May 19-22, 2025](#). Vanderbilt University, Nashville, TN
- 2024 (cancelled due to hurricane) **Fall AMS Southeastern Sectional Meeting.** “Special Session on Ergodic Theory and Discrete Analysis”, Georgia Southern University, Savannah, GA.
- (cancelled due to hurricane) **Fall AMS Southeastern Sectional Meeting.** “Special Session on Approximation Theory and Harmonic Analysis”, Georgia Southern University, Savannah, GA.
- Spring Eastern AMS Sectional,** “Special Session on Recent Advances in Harmonic Analysis and Their Applications to Partial Differential Equations”, Howard University, Washington DC
- Spring Central AMS Sectional,** “Special Session on Recent Developments in Harmonic Analysis”, University of Wisconsin-Milwaukee, Milwaukee, WI
- 2023 **Spring Southeastern AMS Sectional Meeting,** “Special Session on Harmonic Analysis”. Talk: “[Averages over the Gaussian Primes: Improving Estimates and Goldbach’s Conjecture](#)” Georgia Institute of Technology, Atlanta, GA
- 2022 **AWM Research Symposium.** “Averaging with Primes in Progressions”, The Institute for Mathematics and its Applications, Minneapolis, Minnesota

Contributed Talks

- 2023 **International Conference on Approximation Theory and Beyond** “[Lower Estimate on Square Function of an Indicator Set](#)”. Vanderbilt University, Nashville, Tennessee
- 2021 **JMM 2021 - AWM Graduate Student Poster Session.** “[Averaging with the divisor function](#)”. Online

Talks in Seminars & Colloquia

- 2024 **Analysis Seminar** “An ergodic theorem in the Gaussian setting”, School of Mathematics, Washington University in St Louis.
(canceled due to hurricane))**Analysis Seminar** “An ergodic theorem in the Gaussian setting”, School of Mathematics, Georgia Institute of Technology
- Computational Analysis Seminar** “Gaussian Integers: Prime averages and the Goldbach Conjecture.”, Department of Mathematics, Vanderbilt University
- 2023 **Doctoral Dissertation Defence** “[Improving and maximal inequalities in discrete harmonic analysis](#)”, School of Mathematics, Georgia Institute of Technology
- 2022 **Georgia Tech Graduate Student Colloquium** “Improving and maximal inequalities: An introduction to the discrete setting”, School of Mathematics, Georgia Institute of Technology
- Kennesaw State Discrete Math Seminar** “Averaging with Primes in Progressions” Kennesaw State University
- Louisiana State Number Theory Seminar** “Averaging with Primes in Progressions”, Louisiana State University
- 2021 **George M. Georganopoulos Analysis Seminar** “Improving and sparse bounds for a discrete averaging operator involving the divisor function”, Aristotle University of Thessaloniki, Greece.
- Georgia Tech Analysis Seminar** “Improving and sparse bounds for a discrete averaging operator involving the divisor function”, Georgia Institute of Technology
- 2020 **Oral Exam - Research Proposal** Georgia Institute of Technology
Committee members: Michael Lacey (advisor), Christopher Heil, Doron Lubinsky, Shahaf Nitzan.
- Student Analysis Seminar** “The Reflection Principle On The Hyperbolic Plane”, Georgia Institute of Technology, School of Mathematics.
- 2019 **Student Analysis Seminar** “A brief overview of sparse bounds”, Georgia Institute of Technology, School of Mathematics.

- 2018 **Georgia Institute of Technology High-Dimensional Seminar**
 “Giannopolos’s upper bound for the Banach-Mazur distance to the cube”,
 Georgia Institute of Technology, School of Math
- 2017 **Master Thesis Defense** “The Reflection Principle On The Hyperbolic Plane”,
 Aristotle University of Thessaloniki, Department of Mathematics. Committee
 members: Dimitrios Betsakos (advisor), Petros Galanopoulos, Anestis Fotiadis

Summer/Winter Schools & Workshops: Participated

- 2023 **5th BCAM-UPV/EHU summer school on harmonic analysis and PDEs: Sphere Packing**, Bilbao, Spain
 Includes group work and poster presentations in groups of all participants.
- 2022 **“Analysis on the hypercube with applications to quantum computing”**, American Institute of Mathematics ([AIM](#)), San Jose, California
 Included invited expository talk and group work on open problems.
- 2021 **“Discrete Analysis and Complexity of Quantum Algorithms”**,
 University of California Irvine and University of Cambridge, [online](#)
 Included expository talks of all participants.
- 2020 **CUNY learning seminar in Machine Learning**, City University of New York, online
- 2019 **4th BCAM-UPV/EHU summer school on harmonic analysis and PDEs: Restriction theory**, Bilbao, Spain
 Included group work and poster presentations in groups of all participants.
- 2015 **Applying MatLab and Control System Toolbox and Simulink packages in Control Theory**, Aristotle University of Thessaloniki, Greece
 (semester-long winter school)
- 2013 **GAS GeoGebra Software - Dynamic Mathematics for Schools**, 5th
 International Week Dedicated to Mathematics, Thessaloniki, Greece (summer school)

Professional Trainings

- 2024 **Discipline-based education research journal club: Learning from research around equity, diversity, and inclusion in STEM courses.**
 Year-long program; part of Inclusive Excellence Initiative by the Howard Hughes Medical Institute (HHMI IE3), facilitated by Vanderbilt University.
- 2022 **Level up: an advanced LGBTQIA allyship course**, LGBTQIA Resource Center at Georgia Institute of Technology

Topics covered: Historical Foundations, Trans 201, QPOC and Racial Justice, Intersectionality, Advanced Allyship.

Inclusive Language workshop, organized by the DEI committee of the School of Math, Georgia Institute of Technology.

Psychological First Aid, Bloomberg School of Public Health, Johns Hopkins University on Coursera

Level Up Part II: An Advanced Allyship Course, Georgia Institute of Technology LGBTQIA Resource Center

Topics covered: Intersex 101, Non-monosexual identities, Legislative advocacy, Difficult Dialogues, Queer Atlanta bus tour.

GTREET 2022 Georgia Institute of Technology Retreat Exploring Effective Teaching offered by Georgia Institute of Technology's Center for Teaching and Learning

2021 **Question, Persuade, Refer (QPR) Training** Suicide Prevention Gatekeeper Training - End Suicide Initiative at Georgia Institute of Technology

Implicit Bias Training Georgia Institute of Technology, School of Math

Trans 101 Georgia Institute of Technology LGBTQIA Resource Center

2020 **Safe Space Training** Georgia Institute of Technology LGBTQIA Resource Center

2019 **Graduate Student Instructor Training**, Georgia Institute of Technology, School of Math

2017 **Graduate Teaching Assistant Training**, Georgia Institute of Technology, School of Math

Conferences: Attended

2025 **Perspectives on Ergodic Theory and its Interactions**. Institute of Mathematics of the Polish Academy of Sciences, Warsaw June 23-27, 2025

2024 **Pointwise Ergodic Theory & Connections II**. Bristol University, Bristol, UK. June 24 - July 5

2022 **"NCTS Conference on Fractional Integrals and Related Phenomena in Analysis"**, National Center for Theoretical Sciences - Mathematics Division, National Taiwan University, Taipei, Taiwan and online.

"Extremal Problems in Harmonic Analysis, Convexity, and Bellman Functions", Institute for Computational and Experimental Research in Mathematics ([ICERM](#)), Brown University, Providence, Rhode Island

Clemson-GaTech Time-Frequency Meeting Fall 2022, Georgia Institute of Technology, Atlanta, Georgia

- Guido Weiss Memorial Conference On Harmonic Analysis**, Washington University in St Louis, St Louis, Missouri
- 38th Southeastern Analysis Meeting (SEAM)**, University of Florida
- paraDIGMS: Diversity in Graduate Mathematical Sciences - Spring Conference**, Institute for Mathematical and Statistical Innovation, online
- 2021 **paraDIGMS: Diversity in Graduate Mathematical Sciences - Spring Conference**, Institute for Mathematical and Statistical Innovation, online
- Joint Math Meetings**, AMS-MAA, online
- 2020 **2nd Mid Atlantic Analysis Meeting**, University of Pennsylvania, online
- paraDIGMS: Diversity in Graduate Mathematical Sciences - Fall Conference**, Institute for Mathematical and Statistical Innovation, online
- 2019 **Analysis Winter Meeting 2019**, Aristotle University of Thessaloniki , Greece
- 4th Northeastern Analysis Meeting (NEAM)**, Syracuse University, Syracuse, New York
- February Fourier Talks 2019**, University of Maryland, College Park MD
- 2018 **Analysis Winter Meeting 2018**, Aristotle University of Thessaloniki, Greece
- 34th Southeastern Analysis Meeting (SEAM)**, Georgia Institute of Technology, Atlanta GA
- 2017 **Analysis Summer Meeting 2017**, Aristotle University of Thessaloniki, Greece
- 2016 **Analysis Winter Meeting 2016**, Aristotle University of Thessaloniki, Greece
- Analysis Summer Meeting 2016**, Aristotle University of Thessaloniki, Greece
- 2015 **Analysis Winter Meeting 2015**, Aristotle University of Thessaloniki, Greece
- Analysis Summer Meeting 2015**, Aristotle University of Thessaloniki, Greece