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Citizenship: USA
Languages: English, Italian

EDUCATION

- 2021 May Ph.D. Mathematics, The Pennsylvania State University, University Park, PA 16802
Thesis topic: Thermodynamics of some nonuniformly hyperbolic dynamical systems.
Advisor: Yakov Pesin
- 2015 May B.A. Mathematics, Hamilton College, Clinton, NY 13323

RESEARCH INTERESTS

Dynamical systems, ergodic theory, hyperbolic dynamics, thermodynamic formalism.

PUBLICATIONS

4. SRB measures of singular hyperbolic attractors. *Disc. Cont. Dyn Sys.* **42**(7), 3415-3430. 2022. [arXiv:2104.10773](https://arxiv.org/abs/2104.10773).
3. Thermodynamics of smooth models of pseudo-Anosov homeomorphisms. *Erg. Th. Dyn. Sys.* **42**(3), 1284-1326. 2022. [arXiv:1912.09625](https://arxiv.org/abs/1912.09625).
2. Equilibrium states of almost Anosov diffeomorphisms. *Disc. Cont. Dyn. Sys.* **40**(2), 767-780. 2020. [arXiv:1901.04631](https://arxiv.org/abs/1901.04631).
1. Initial and Boundary Value Problems for the Caputo Fractional Self-Adjoint Difference Equations. (with K. Ahrendt, L. DeWolf, L. Mazurowski, K. Mitchell, and T. Rowling.) *Enlightenment in Pure and Applied Mathematics.* **2**(1). 2016. [arXiv:2002.07909](https://arxiv.org/abs/2002.07909).

RESEARCH TALKS

- 2023 May Ergodic Theory and Dynamical Systems Seminar, University of Warwick
- 2023 March Dynamical Systems Seminar, International Centre for Theoretical Physics
- 2022 Dec International and Online Mathematics Days III, Universidade Federal de Viçosa (Online)
- Oct Dynamical Systems Working Seminar, Penn State University
Dynamical Systems Seminar, University of Exeter.
- Sept Dynamical Systems Seminar, University of Maryland
- Feb Dynamical Systems Seminar, Scuola Normale Superiore di Pisa (Hybrid)
- 2020 Oct Workshop in Dynamical Systems and Related Topics, Penn State University (Online)
Dynamical Systems Seminar, University of Maryland (Online)
- June Mathematics Seminar, International Center for Theoretical Physics (Online)
- 2019 Aug 2020 Vision for Dynamical Systems, IMPAN
- Apr Workshop on Dynamical Systems and Related Topics, University of Maryland
- 2018 Aug Dynamical Systems Working Seminar, Penn State University
- 2015 Jan Undergraduate Poster Session, Joint Mathematics Meetings (Poster)
- 2014 Sept Department of Mathematics Colloquium, Hamilton College.

OTHER TALKS

- 2017 Oct Math Department Diversity Seminar, Penn State University.

OTHER PROFESSIONAL TRAVEL

- 2023 Apr Master Class on Low Dimensional Dynamical Systems, Stockholms Matematikcentrum
- 2022 Nov Workshop on Dynamical Systems and Related Topics, Penn Staet University
- Oct International Conference on Dynamical Systems, IMPA
- May Mutually enhancing connections between ergodic theory, combinatorics, and number theory: Minicourse by Vitaly Bergelson, Università di Pisa
- 2021 Nov Markov partitions and Young towers in dynamics: Workshop at ICTP (online)
- 2020 Jan Joint Mathematics Meetings
- 2017 Aug Current Trends in Dynamical Systems and the Mathematical Legacy of Rufus Bowen, University of British Columbia
- Jun Workshop on Hyperbolic Dynamics, International Center for Theoretical Physics
- May Summer School on Dynamical Systems, University of Houston
- Apr Workshop on Dynamical Systems and Related Topics, University of Maryland

TEACHING EXPERIENCE
Coventry University, Coventry Campus

- 2023 Fall 4001CMD: Mathematical Skills for Computing Professionals, *Module Leader*
 4007CMD: Calculus, *Module Leader*
 5033CEM: Real and Complex Analysis, *Module Leader*

- 2023 Sum 4068CEM: Mathematics for Computer Science, *Module Leader*

INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS DIPLOMA PROGRAM

- 2022 Fall Topology, *Tutor*
 Spr Dynamical Systems, *Tutor*

INTERNATIONAL MATHEMATICS MASTER

- 2021 Fall Complex Analysis (Online), *Course Coordinator and Tutor*

THE PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY PARK

- 2021 Spr Math 429: Introduction to Topology, *Teaching Assistant*
 2020 Fall Math 141: Calculus with Analytic Geometry II (Online), *Instructor*
 Spr Math 111: Techniques of Calculus II, *Instructor*
 2019 Fall Math 220: Matrices, *Instructor*
 Spr Math 231: Calculus of Several Variables, *Instructor*
 2017 – 2019 Math 230: Calculus and Vector Analysis, *Instructor*
 2017 Sum Math 141: Calculus with Analytic Geometry II (Online), *Teaching Assistant*
 2016 – 2017 Math 251: Ordinary and Partial Differential Equations, *Instructor*
 2016 Sum Math 110: Techniques of Calculus I, *Instructor*
 Spr Math 021: College Algebra I, *Instructor*
 2015 Fall Math 022: College Algebra II (Online), *Teaching Assistant*

HAMILTON COLLEGE

- 2015 Spr Math 337: Partial Differential Equations, *Grader*
 2012 – 2015 Quantitative and Symbolic Reasoning Center Tutor

SERVICES

- 2021 – 2023 Dynamical Systems Seminar, International Centre for Theoretical Physics, *Organizer*
 2021 – 2023 Faculty Council, International Centre for Theoretical Physics, *Postdoctoral Representative*
 2020 – 2021 Graduate Student Association, Penn State Math Department, *President*
 2018 – 2021 Graduate Student Open House, Penn State Math Department, *Organizer and Panelist*
 2018 – 2020 Student-Directed Colloquium, Penn State Math Department, *Organizer*
 2018 – 2020 Graduate Student Mentorship Program, Penn State Math Department, *Mentor and Organizer*
 2017 – 2021 Climate and Diversity Committee, Penn State Eberly College of Science, *Member*
 2017 – 2021 Climate and Diversity Committee, Penn State Department of Mathematics, *Member*
 2016 – 2017 Climate and Diversity Workshop Committee, *Member, Chair (2017)*

AWARDS AND HONORS**ACADEMIC**

- 2020 Oct Alumni Association Dissertation Award (Nominee), Penn State University
Sept August and Ruth Homeyer Fellowship, Penn State University
2019 Sept Vollmer-Kleckner Scholarship in Science, Penn State University
2016 – 2018 Jack and Eleanor Pettit Scholarship in Science, Penn State University
2015 Sept Vollmer-Kleckner Scholarship in Science, Penn State University
May Φ BK Member, Hamilton College
May Elihu Root Fellowship for Graduate Studies, Hamilton College
May Tompkins Prize in Mathematics, Hamilton College
May Departmental Honors in Mathematics, Hamilton College
2014 Aug Edward Huntington Memorial Prize Scholarship, Hamilton College

TEACHING

- 2020 Oct Harold F. Martin Graduate Assistant Outstanding Teaching Award (Nominee), Penn State University
2018 Apr Charles H. Hoover Memorial Graduate Teaching Award, Penn State University Department of Mathematics
Apr Graduate Teaching Associateship, Penn State University Department of Mathematics
2017 Apr Graduate Teaching Award, Penn State University Department of Mathematics

SERVICE

- 2018 Apr ZZRQ Service Award, Penn State University Department of Mathematics
Jan Dean's Climate and Diversity Award (Nominee), Penn State University

PROFESSIONAL MEMBERSHIPS

- 2019 – Mathematics Association of America
2015 – American Mathematical Society