Dominic F. Veconi

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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

PREVIOUS POSITIONS

2023 –   Coventry University, Department of Mathematics, Physics and Data Science, *Assistant Teaching Fellow*

2021 – 2023   Abdus Salam International Centre for Theoretical Physics, *Postdoctoral Fellow*

2016 – 2021   Pennsylvania State University, *Graduate Teaching Assistant*

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`.

3. Thermodynamics of smooth models of pseudo-Anosov homeomorphisms. *Erg. Th. Dyn. Sys.* **42**(3), 1284-1326. 2022. `arXiv:1912.09625`.

2. Equilibrium states of almost Anosov diffeomorphisms. *Disc. Cont. Dyn. Sys.* **40**(2), 767-780. 2020. `arXiv: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. Rolling.) *Enlightenment in Pure and Applied Mathematics.* **2**(1). 2016. `arXiv:2002.07909`.

Research Talks

2023	May	Ergodic Theory and Dynamical Systems Seminar, University of Warwick
2023	Mar	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)
	Jun	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, *Organizer*
2017 – 2021	Climate and Diversity Committee, Penn State Eberly College of Science
2017 – 2021	Climate and Diversity Committee, Penn State Department of Mathematics
2016 – 2017	Climate and Diversity Workshop Committee, *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	ΦBK 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