Andre P. Oliveira

Contact Information

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Education

Ph.D. student in Mathematics, Wesleyan University, August 2015 – present.
Advisor: Felipe A. Ramírez.

B.A. in Mathematics, B.A. in Computer Science, Manhattan College, August 2011 – May 2015.

Publications

Khintchine's Theorem with rationals coming from neighborhoods in different places, (submitted)

(joint w. A. Calderon, S. Coles, D. Davis, J. Lanier) *How to hear the shape of a billiard table*, (preprint)

(joint w. H. Tyler) *Measurement and comparison of passing networks in collegiate soccer*, Minnesota Journal of Undergraduate Mathematics, [S.l.], v. 1, n. 1, Dec. 2015.

Talks

(invited) Diophantine Approximations: What do pigeons have to do with it?, 403 Lecture, Southwestern University, October 2020.

On Diophantine approximations across completions of Q, Graduate Student Seminar, Wesleyan University, February 2020.

How to hear the shape of a billiard table, Graduate Student Seminar, Wesleyan University, September 2019.

A Dynamical View of Numbers, Undergraduate Colloquium, University of Hartford, February 2019.

A connection between badly approximable numbers and continued fractions, Graduate Student Seminar, Wesleyan University, October 2018.

Continued Fractions and Geodesics on the Modular Surface, Strength in Numbers, Queen's University, Canada, May 2018.

Dani's Correspondence and Schmidt Games, Topology et al. Seminar, Wesleyan University, March 2018.

Shedding light on Illumination, Graduate Student Seminar, Wesleyan University, September 2017.

A brief glance at Ergodic Theory, Graduate Student Seminar, Wesleyan University, February 2017.

A look at the $25,000,000,000 eigenvector, Graduate Student Seminar, Wesleyan University, October 2016.

Defensive Forwards and Offensive Backs: The 2013 Season of Manhattan College Women's Soccer, Joint Mathematics Meetings, San Antonio, January 2015.

Conferences Attended

Lattice Point Distribution and Homogeneous Dynamics, ICERM (virtual), June 2020.
Workshop on Dynamical Systems and Related Topics, Penn State, September 2019.
Midwest Dynamical Systems Early Career Conference, Ohio State University, May 2019.
Beyond the Binary, University of Hartford, April 2019.
Workshop on Dynamical Systems and Related Topics, University of Maryland, April 2019.
Workshop on Dynamical Systems and Related Topics, Penn State, September 2018.
Houston Summer School on Dynamical Systems, University of Houston, May 2018.
Strength in Numbers, Queen's University, Kingston, Canada, May 2018.
Upstate New York Number Theory Conference, University of Buffalo, April 2018.
Workshop on Dynamical Systems and Related Topics, University of Maryland, April 2018.
Graduate Student Conference in Algebra, Geometry, and Topology, Temple University, June 2017.
Upstate New York Number Theory Conference, Binghamton University, May 2017.
Joint Mathematics Meetings, Atlanta, GA, January 2017.
Joint Mathematics Meetings, San Antonio, TX, January 2015.

Teaching Experience

Instructor, Wesleyan University.

Sole instructor during meeting hours with course materials created in conjunction with fellow instructors and faculty mentor for the following:

- Graduate Pedagogy, Fall 2020
- Elements of Calculus, Part I, Fall 2019
- Elements of Calculus, Part I, Fall 2018
- Introductory Calculus I, Fall 2017
- Introductory Calculus II, Spring 2017

Graduate Teaching Assistant, Wesleyan University.

- Complex Analysis, Fall 2020

  Held office hours and graded homeworks.
- Multivariable Calculus, Spring 2020

  Primarily held extra office hours. Also ran lectures on-and-off as needed throughout the semester.
- Math Workshop, Spring 2019

  Helped students understand lecture notes and homework assignments for varying math classes including: Abstract Algebra, Real Analysis, Foundations of Mathematics, Statistics, and Applied Topology.
- Real Analysis, Spring 2018

  Held office hours and wrote homework solutions.
- Discrete Structures, Fall 2016

  Held office hours as well as graded homeworks and proofs.
- Math Workshop, Spring 2016

  Helped students understand lecture notes and homework assignments for varying math classes including: Abstract Algebra, Linear Algebra, Multivariable Calculus, and Probability.
- Introduction to Programming, Fall 2015

Mentoring

- Directed Reading Program, Wesleyan University

  More information available on our website (https://drp.site.wesleyan.edu/).

  - An Introduction to Ergodic Theory, Spring 2019
  - Continued Fractions and Approximability, Fall 2018

Services

Vice-President, AMS Local Chapter, Wesleyan University, May 2019 – present.
Co-organizer, Directed Reading Program, Wesleyan University, September 2018 – present.
Webmaster, Graduate Student Association (GSA), Wesleyan University, May 2017 – present.
Graduate Community Standards Board member, GSA, Wesleyan University, May 2017 – 2018.
President, AMS Local Chapter, Wesleyan University, August 2016 – May 2019.

Computing Skills

Programming Languages: C, C++, Java, Javascript, PHP, Python.
Other: LaTeX, HTML5, CSS3, Markdown, SQL, NodeJS, MS Office, Maple, Linux, Windows, git, GitHub.