Vitor Braga

Personal Information

Citizenship: Brazilian

Date of Birth: August 2, 2002

Pronouns: They/Them

Research Interests

Complex Geometric Analysis , Pluripotential Theory on Compact Complex Manifolds, Several Complex Variables, Complex Dynamics

Education

B.S. in Mathematics, Indiana University Bloomington, Expected May 2025

Minor in Philosophy, Indiana University Bloomington, Expected May 2025

Graduate Coursework Taken

Complex Analysis 2, Spring 2023

Differential Geometry 1, Spring 2023

Real Variables 1, Fall 2023

Survey of Algebra, Fall 2023

Selected Topic in Differential Geometry: Complex Dynamics, Spring 2024

Real Variables 2, Spring 2024

Topology 2, Spring 2024

Reading Course on Pluripotential Theory on Compact Complex Manifolds, Spring 2024

Functional Analysis 1, Fall 2024

Algebraic Topology 1, Fall 2024

Partial Differential Equations 2, Fall 2024

Research Projects

Research Experience for Undergraduates, Indiana University, Summer 2023. Advised by Dylan P. Thurston.Project Title: "Graph energies and Sierpinski carpets." More information here: https://math.indiana.edu/undergraduate/reu-summer-research-program/past-reu/2022/2022-projects.html

Teaching Experience

Undergraduate Instructor for the department of mathematics at Indiana University, January 2023 - Currently

Awards

Wells Scholarship recipient, class of 2026. More information at: https://wellsscholars.indiana.edu/index.html

Jeffrey & Deborah King Scholarship recipient, Spring 2024. More information here: https://math.indiana.edu/undergraduate/scholarships-awards/index.html

Corey M. Manack Memorial Scholarship recipient, Spring 2024. More information here: https://math.indiana.edu/undergraduate/scholarships-awards/index.html

Gold Medal in the 2018 Brazilian Olympiad of Mathematics

3 Gold Medals in the Brazilian Olympiad of Astronomy and Astrophysics (2018, 2020 and 2021 editions), and oneSilver Medal (2019 edition)

Conference Talks

Indiana Undergraduate Math Research Conference, Indiana University-Purdue University Indianapolis, June2023. Title: "Expansivity on Julia Sets." Joint work with David Sieg, under the supervision of Dylan Thurston. Abstract can be found here: http://reu.math.iupui.edu/Abstracts.pdf

Conferences Attended

C.I.M.E. School on Calabi-Yau Varieties, August 2024

SMS 2024 - Flows and Variational Methods in Riemannian and Complex Geometry: Classical and Modern Methods, June 2024

Midwestern Workshop at Asymptotic Analysis, Indiana University-Purdue University Indianapolis, October 2023

Indiana Undergraduate Math Research Conference, Indiana University-Purdue University Indianapolis, July 2023

Early Career Complex Dynamics Workshop, Indiana University Bloomington, June 2023

Service

President of the Math Club at Indiana University, October 2023- Currently

Officer of the Physics Club at Indiana University, August 2022 - Currently