Eduardo Ventilari Sodré

Curriculum Vitae

✉ *eduardo_ventilari_sodre@brown.edu*
🖥 *evsmath.github.io/*

Education

2023 – **Brown University**, *Ph.D. in Mathematics*, Providence, USA
2019 – 2022 **Universidade de São Paulo (IME-USP)**, *B.Sc. in Mathematics*, São Paulo, Brazil
Weighted average: 9.8/10, 1st in class

Publications and Preprints

2023 *Revisiting Arnold's topological proof of the Morse index theorem.* ArXiv.

2021 *Classification of linear operators satisfying $(Au, v) = (u, A^r v)$ or $(Au, A^r v) = (u, v)$ on a vector space with indefinite scalar product* (with V. S. Borges, I. Kashyba, V. V. Sergeichuk & A. Zaidan). Linear Algebra and its Applications, v. 611, p. 118-134, 2021.

Grants and Scholarships

2021 – 2022 **FAPESP Undergraduate Research Scholarship**
2019 – 2021 **CNPq Undergraduate Research Scholarship**
2020 **IMPA Summer Program Scholarship**
2019 **PUB Undergraduate Research Scholarship**

Awards and Fellowships

2023-2024 **Chandler O. Meyer Fellowship Fund in Mathematics**, *Brown University*
2023-2024 **Chancellor Robert Fellow**, *Brown University*
2023 **Institute of Mathematics and Statistics Best Student Prize**, *IME-USP*, Class of 2022

Olympiads and Competitions

International Mathematics Competition, *University College London*
First Prize: 2022, 2021
Second Prize: 2020
Competencia Iberoamericana Interuniversitaria de Matemáticas, *Universidad Antonio Nariño*
Gold Medal: 2022
Silver Medal: 2020
Brazilian Universitary Mathematics Olympiad, *SBM & IMPA*
Gold Medal: 2022
Silver Medal: 2023, 2020, 2019
Elon Lages Lima Mathematics Competition, *SBM & IMPA*
Gold Medal: 2022, 2021
Silver Medal: 2020

Teaching and Tutoring

2024 **TA for "Single Variable Calculus II"**, *Brown University*
2021 **TA for "Introduction to Complex Analysis"**, *IME-USP*

Other Activities

Talks

Sep. 2023 **Graduate Student Seminar at Brown**, *A Glimpse on Holomorphic Dynamics*
Aug. 2023 **Geometry Research Group Seminar at IME-USP**, *Revisiting Arnold's Topological Proof of the Morse Index Theorem*

Extracurricular Courses

2021	**Exploring the Mandelbrot Set, reading The Orsay Notes**, *IMPA*
	Doctoral level reading course: A-
2021	**Introduction to Complex Dynamics**, *IMPA*
	Masters Level Course: A+
2020	**Introduction to Number Theory**, *IMPA*
	Masters level course: A+

Seminar Groups

Brown University Geometry/Topology Seminar, *Brown University*

Geometry Research Group Seminar at IME-USP, *IME-USP*

Quasiconformal Maps and Teichmüller Theory

S4 Student Seminar Group, *IME-USP*
Organizer and Presenter

Matrix Problems and Quiver Representations in Linear Algebra, *IME-USP*

Aleph 1 Student Seminar on Set Theory, *IME-USP*

Events Organized

2024	**AMS New England Graduate Student Conference**, *Brown University*
2022	**6th TWAS Young Affiliates Network Thematic Workshop in Mathematics**, *IME-USP*

Events Attended

2023-2024	**Geometry and Topology Seminar at Brown and Yale (GATSBY)**, *Brown University*
2023	**34th Brazilian Colloquium of Mathematics (CBM)**, *IMPA*
2022	**Complex Dynamics in the Tropics**, *IMPA*
	Financial support by CNPq and FAPERJ
2022	**São Carlos Conference in Geometry**, *ICMC-USP*
	Poster "The Sasaki Metric and the Geodesic Flow"
2021	**33rd Brazilian Colloquium of Mathematics (CBM)**, *IMPA*
2020	**International Symposium of Scientific Initiation and Technology of USP**, *USP*
	Poster "A Generalization of the Theorem on Tangent Bifurcations"

Languages

Portuguese	Native	
English	Fluent	TOEFL iBT Score: 118/120, 2022