Eduardo Ventilari Sodré

Curriculum Vitae

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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 **Sheridan Teaching Seminar Program Certificate**, *Brown University*, The Harriet W. Sheridan Center for Teaching and Learning

2024 TA for "Single Variable Calculus II", Brown University

2021 TA for "Introduction to Complex Analysis", IME-USP

Other Activities

Positions

2024 Secretary of the Brown Chapter of the AMS

Talks

Sep. 2023 Graduate Student Seminar at Brown, A Glipmse 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