Eduardo Ventilari Sodré

Curriculum Vitae

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🖥 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   **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

2021   **TA in "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*

Summer and Extra 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

2023 **Brown University Geometry/Topology Seminar**, *Brown University*

2022 **Geometry Research Group Seminar at IME-USP**, *IME-USP*

2022 **Quasiconformal Maps and Teichmüller Theory**

2020 – 2022 **S4 Student Seminar Group**, *IME-USP*
Organizer and Presenter

2019 – 2020 **Matrix Problems and Quiver Representations in Linear Algebra**, *IME-USP*

2019 **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

Fall 2023 **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