

# Eduardo Ventilari Sodré

## Curriculum Vitae

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📄 [evsmath.github.io/](https://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, 1<sup>st</sup> 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 University 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*

#### 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

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

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"

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## Languages

Portuguese Native

English Fluent TOEFL iBT Score: 118/120, 2022