Eduardo V. Sodré
Curriculum Vitae

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🖥 evsmath.github.io/

Education

2023 – **PhD in Mathematics**, *Brown University*, Providence, USA

2019 – 2022 **Bachelor's Degree in Mathematics**, *Mathematics and Statistics Institute of the University of São Paulo (IME-USP)*, São Paulo, Brazil
Weighted average: 9.8/10, 1st in class

Undergraduate Thesis: Introduction to Riemannian Geometry
Advisor: Prof. Claudio Gorodski

Publications and Preprints

2023 *Revisiting Arnold's topological proof of the Morse index theorem.* (arxiv: math.DG/2307.00655)

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. `https://doi.org/10.1016/j.laa.2020.12.005`

Scientific Initiation Projects

2021 – 2022 **Introduction to Riemannian Geometry** (FAPESP project 2021/10816-4)

2021 **Introduction to Smooth Manifolds** (CNPq)

2019 – 2020 **Introduction to Discrete Dynamical Systems** (PUB and CNPq)

2018 **Axiomatic Synthetic Geometry** (PIC Jr.)

Grants and Scholarships

2021 – 2022 **FAPESP Undergraduate Research Scholarship** (project 2021/10816-4)

2019 – 2021 **CNPq Undergraduate Research Scholarship**

2020 **IMPA Summer Program Scholarship**

2019 **PUB Undergraduate Research Scholarship**

Prizes and Awards

2023 **Institute of Mathematics and Statistics Best Student Prize**, *IME-USP*, Class of 2022

Olympiads and Competitions

International Mathematics Competition (IMC), *UCL*

2022 First Prize

2021 First Prize

2020 Second Prize

Competencia Iberoamericana Interuniversitaria de Matemáticas (CIIM), *UAN*

2022 Gold Medal

2020 Silver Medal

Brazilian Universitary Mathematics Olympiad (OBMU), *SBM & IMPA*

2023 Silver Medal

2022 Gold Medal

2020 Silver Medal

2019 Silver Medal

Elon Lages Lima Mathematics Competition, *SBM & IMPA*

2022 Gold Medal

2021 Gold Medal

2020 Silver Medal

Other Activities

Invited Talks

August 2023 **Geometry Research Group Seminar at IME-USP**

Summer Courses

2021 **Introduction to Complex Dynamics**, *IMPA*, Masters Level Course, A+

2020 **Introduction to Number Theory**, *IMPA*, Masters Level Course, A+

Minicourses

2023 **Geometry of Painlevé Equations**, *34th Brazilian Colloquium of Mathematics*

2022 **Introduction to Characteristic Classes**, *IME-USP*

2021 **A Gentle Introduction to the Topology and Geometry of 3-manifolds**, *33rd Brazilian Colloquium of Mathematics*

Seminar Groups

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

2022 **Quasiconformal Maps and Teichmüller Theory**, *online*

2020 – 2022 **Organizer and presenter of the S4 Student Seminar Group**, *IME-USP*

2021 **Exploring the Mandelbrot Set, reading The Orsay Notes**, *IMPA*, doctoral level reading course, A+

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

2019 **Aleph 1 Student Seminar on Set Theory**, *IME-USP*

Teaching and Tutoring

2021 **Volunteer TA in "Introduction to Complex Analysis"**, *IME-USP*

Events Attended

2023 **34th Brazilian Colloquium of Mathematics (CBM)**, *IMPA*

2022 **Complex Dynamics in the Tropics**, *IMPA*, Rio de Janeiro, Brazil
Financial support by CNPq and FAPERJ

2022 **6th TWAS Young Affiliate Network Thematic Workshop in Mathematics**, *IME-USP*, São Paulo, Brazil
Local organizing committee

2022 **São Carlos Conference in Geometry**, *ICMC-USP*, São Carlos, Brazil
Poster "The Sasaki Metric and the Geodesic Flow"

2021 **33rd Brazilian Colloquium of Mathematics (CBM)**, *online*

2020 **International Symposium of Scientific Initiation and Technology of USP**, *online*
Poster "A Generalization of the Theorem on Tangent Bifurcations"

Languages

Portuguese Native

English Fluent TOEFL iBT Score: 118/120, 2022