

Marisa dos Reis Cantarino

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Universidad de Chile

Centro de Modelamiento Matemático

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- CURRENT POSITION** *Postdoctoral Researcher at the Centro de Modelamiento Matemático, Universidad de Chile. Working on computational and theoretical aspects of Dynamical Systems.*
- PREVIOUS POSITIONS**
- Monash University**, Melbourne, Australia Jul 2023 - Ago 2025
Research Fellow
Computer-assisted proofs in partially hyperbolic dynamics
- Fluminense Federal University**, Niterói, Brazil Jun 2022 - Mai 2023
Postdoctoral researcher
SRB measures for random and partially hyperbolic endomorphisms
- EDUCATION**
- University of Campinas**, Campinas, Brazil Mar 2018 - Mai 2022
PhD in Mathematics
Advisor: Jos´e R´egis Azevedo Var˜ao Filho
Thesis title: *Regularity of foliations and rigidity for Anosov endomorphisms.*
- University of S˜ao Paulo**, S˜ao Paulo, Brazil Jan 2018 - Dec 2021
Bachelor in Mathematics Education.
- University of S˜ao Paulo**, S˜ao Paulo, Brazil Mar 2016 - Mar 2018
Master in Applied Mathematics,
Advisor: Manuel Valentim de Pera Garcia
Monograph title: *Periodic billiard orbits in obtuse triangles.*
- University of S˜ao Paulo**, S˜ao Paulo, Brazil Feb 2012 - Dec 2015
Bachelor in Applied and Computational Mathematics.
- PUBLICATIONS**
- Cantarino, M. and Var˜ao, R. and Silva S. T., *Holonomies for foliations with extreme disintegration behavior.* Stochastics and Dynamics. <https://doi.org/10.1142/S0219493724500242> 2024.
- Álvarez, C. F. and Cantarino, M., *Existence and uniqueness of measures of maximal entropy for partially hyperbolic endomorphisms.* Journal of Statistical Physics. <https://doi.org/10.1007/s10955-023-03206-3> 2023.
- Cantarino, M. and Var˜ao, R., *Anosov endomorphisms on the 2-torus: Regularity of foliations and rigidity.* Nonlinearity. <https://doi.org/10.1088/1361-6544/acf267> 2023.
- PREPRINTS**
- Cantarino, M. and Freijo, C., *Cohomology of Lipschitz-valued cocycles.* <https://arxiv.org/abs/2508.14446> 2025.
- Cantarino, M. and Santiago, B., *U-Gibbs measure rigidity for partially hyperbolic endomorphisms on surfaces.* <https://arxiv.org/abs/2407.03780> 2024.

INVITED TALKS

- **104° EDAÍ.** *Rigidez de medidas u -Gibbs para mapas expansores parcialmente hiperbólicos em superfícies.* Rio de Janeiro, Brazil. 2024
- **89° EDAÍ.** *Anosov Endomorphisms on surfaces: regularity of foliations and rigidity.* Rio de Janeiro, Brazil. 2022
- **Semana Temática de Sistemas Dinâmicos.** *Anosov endomorphisms on the 2-torus: regularity of foliations and rigidity.* Salvador, Brazil. 2022

RECENT EVENTS

- **Dynamics, Topology and Computations.** Talk: *Blenders and robust transitivity for a family of derived-from-Anosov maps.* Bełdów, Poland. 2025
- **Beyond Uniform Hyperbolicity.** Talk: *Computer-assisted proof of robust transitivity in dimension 3 using blenders.* Trieste, Italy. 2025
- **Probability and Dynamical Systems.** Creswick, Australia. 2025
- **AustMS 2024.** Talk: *Blenders and robust transitivity for a family of derived-from-Anosov maps on T^3 .* Auckland, New Zealand. 2024
- **WIMSIG Conference 2024.** Talk: *Inverse limit and existence of equilibrium states for partially hyperbolic endomorphisms.* Sydney, Australia. 2024
- **AustMS-WIMSIG Early Career Workshop.** Sydney, Australia. 2024
- **PiotrFest conference.** Talk: *Blenders on derived-from-Anosov maps of the 3-torus.* Krakow, Poland. 2024
- **Computer-assisted proofs, proof assistants and visualization in dynamical systems.** Pisa, Italy. 2024
- **Equadiff 2024.** Talk: *Blenders and robust transitivity for a family of derived from Anosov maps.* Karlstad, Sweden. 2024
- **Dynamics and Computation.** Talk: *Robust transitivity for a 2-parameters family of derived-from-Anosov diffeomorphisms on T^3 .* Creswick, Australia. 2024
- **AustMS 2023.** Talk: *u -Gibbs measure rigidity for uniformly expanding partially hyperbolic endomorphisms on surfaces.* Brisbane, Australia. 2023
- **1° Workshop de Sistemas Dinâmicos.** Minicourse: *Introducción a la dinámica hiperbólica.* Cartagena, Colombia (online). 2023
- **Celebrating Women In Math 2023.** Rio de Janeiro, Brazil. 2023
- **Beyond Uniform Hyperbolicity.** Poster: *u -Gibbs measure rigidity for uniformly expanding $p. h.$ endomorphisms on surfaces.* Bełdów, Poland. 2023
- **Workshop: Smooth and topological dynamics.** Warsaw, Poland. 2023

TEACHING

Teaching Assistant, Monash University

Course: Engineering Mathematics
Mathematics Learning Centre

Mar 2025 - May 2025
Aug 2023 - Jun 2024

Teaching Assistant, University of Campinas

Course: Calculus III.
Course: Linear algebra.

Mar 2020 - Jul 2020
Aug 2019 - Dec 2019

Teaching Assistant, University of São Paulo

Course: Classical analytical mechanics.
Course: Linear algebra applications.
Course: Numerical Methods and Applications.

Jul 2017 - Dec 2017
Feb 2017 - Jun 2017
Aug 2016 - Dec 2016

EXPERIENCE

Research supervision

Undergraduate research: *Separation of orbits for suspended irrational rotations.*
Vitor Gomes Ferreira, Fluminense Federal University. 2022

Scientific Committee

I Encontro Paulista da Pós-Graduação em Matemáticas.
São Paulo, Brazil (online).

Feb 2022

Celebrating Women in Math.
Rio de Janeiro, Brazil (online).

Mai 2023

Event organization

Support to the organization: *VI Brazilian School on Dynamical Systems.*
Fortaleza, Brazil.

Sept 2021

Support to the organization: *33rd Brazilian Mathematical Colloquium.*
Rio de Janeiro, Brazil

Aug 2021

Organizer: *VI Encontro Paulista de Alunos de Dinâmica and Dias Dinâmicos Paulista.* Campinas, Brazil.

Jan 2020

Brazilian Mathematical Olympiad for Public School Students

Correction. 2015, 2016, 2017, 2018, 2021

Unicamp Mathematical Olympiad

Correction. 2020, 2021

Committee member, University of São Paulo

Women's refuge committee. University of São Paulo. May 2017 - Mar 2018

Student Representative, University of São Paulo

Congregation. Jan 2016 - Dec 2017

Graduate Commission. Jan 2017 - Dec 2017

Graduate Coordination - Applied Maths. Department. Apr 2016 - Dec 2017

**GRANTS,
AWARDS
AND TITLES**

- Cheryl E. Praeger Travel Award - AustMS 2025
- Advancing Diversity in Science Grant - Monash University 2023
- Honourable Mention for the Bachelor's Degree in Mathematics Education of the University of São Paulo 2021
- Honourable Mention for the Bachelor's Degree in Applied and Computational Mathematics of the University of São Paulo 2016

Brazilian Mathematical Olympiad for Public School Students (OBMEP)

- Gold medal - 7th OBMEP 2011
- Silver medal - 6th OBMEP 2010
- Silver medal - 5th OBMEP 2009
- Gold medal - 4th OBMEP 2008
- Silver medal - 3th OBMEP 2007

LANGUAGES

- **Portuguese:** native
- **English:** fluent (reading, listening, writing); proficient (speaking)
- **Spanish:** proficient (reading, listening); intermediate (writing, speaking)