

Luiz Felipe Silva Marques

Born in Natal, RN, Brasil, 15 May 2000

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EDUCATION

DM–UFPB Universidade Federal da Paraíba

PhD in Mathematics

João Pessoa, PB, Brasil

2025–Current

- Research interests include Partial Differential Equations and Geometric Analysis.

IME–USP Universidade de São Paulo

BSc in Mathematics

São Paulo, SP, Brasil

2020–2024

- Average grade: 9.6/10.
- Undergraduate thesis: Several Complex Variables and Hartog’s Theorem.
- Advisor: Paulo Domingos Cordaro.

EXPERIENCE

IME–USP Universidade de São Paulo

Undergraduate research project in Analysis

São Paulo, SP, Brasil

2022–2024

- Supervised by Prof. Paulo Domingos Cordaro.
- Supported by a grant from the São Paulo Research Foundation (FAPESP).
- Studied several topics in Analysis, including integration theory, L^p spaces, topological vector spaces, distribution theory, the Fourier transform, and Sobolev spaces. The project was guided by Terence Tao’s book “[An Epsilon of Room, I: Real Analysis](#)”.

ICMC–USP Universidade de São Paulo

Summer program: Mathematics research days for undergraduates

São Paulo, SP, Brasil

Jan–Mar 2024

- Supported by a grant from the São Paulo Research Foundation (FAPESP).
- A highly selective summer program admitting approximately ten undergraduate students and offering a research-oriented experience aimed at achieving original contributions in some mathematical fields. Further information is available on the [program’s website](#).

TUM Technische Universität München

Exchange semester

Munich, Germany

2023

- Supported by the Merit Scholarship from Universidade de São Paulo.
- Completed two graduate courses during the program: Functional Analysis and Probability Theory.

IME–USP Universidade de São Paulo

Undergraduate research project in Dynamical Systems

São Paulo, SP, Brasil

2020–2022

- Supervised by Prof. Sônia Regina Leite Garcia and Prof. Manuel Valentim de Pera Garcia.
- Supported by the PUB Scholarship from Universidade de São Paulo (USP).
- Studied some topics in discrete dynamical systems, including hyperbolicity, the quadratic family, symbolic dynamics, topological conjugacy, chaos, structural stability, Sharkovsky’s theorem, the Schwarzian derivative, and bifurcation theory.

TEACHING

Teaching Assistant at IME–USP Calculus I, 1st semester undergraduate course	2024.1
Teaching Assistant at IME–USP Analysis on \mathbb{R}^n , 4th semester undergraduate course	2023.2
Teaching Assistant at IME–USP General Topology, graduate course	2023.1
Teaching Assistant at IME–USP Introduction to Number Theory, 1st semester undergraduate course	2022.1
Teaching Assistant at IF–USP Calculus II for Physics, 2nd semester undergraduate course	2021.2

SCHOLARSHIPS AND AWARDS

FAPESP Scientific Initiation Scholarship Undergraduate research project in Analysis	2022–2023 Grant 22/01477-4
ICMC–USP Summer Program Scholarship Mathematics research days for undergraduates	2024
USP Merit Scholarship Exchange program at Technische Universität München, Germany	2023
USP Scientific Initiation Scholarship Undergraduate research project in Dynamical Systems	2020–2022
IMECC–UNICAMP Summer Program Scholarship Linear Algebra course, grade obtained: A+	2022
Bronze Medal Elon Lages Lima Math Competition Organized by the Brazilian Mathematical Society (SBM)	2021

TALKS

Locally convex topological vector spaces 31° SIICUSP International Symposium on Scientific and Technological Research, USP	2023
The Krein-Milman theorem and some applications Functional Analysis student seminar group, IME–USP	2023
Recurrence and transience in simple random walks S4 student seminar group, IME–USP	2023
Symbolic dynamics: an introduction through the logistic function S4 student seminar group, IME–USP	2022

EVENTS ATTENDED

31° SIICUSP International Symposium on Scientific and Technological Research IME–USP, São Paulo, SP, Brasil	2023
34th CBM Brazilian Colloquium of Mathematics IMPA, Rio de Janeiro, RJ, Brasil	2023
XXIV Undergraduate Mathematics Symposium ICMC–USP, São Carlos, SP, Brasil	2021

EXTRACURRICULAR ACTIVITIES

1st Pure Mathematics Week at IME–USP Co-founder and organizer	2024
<ul style="list-style-type: none">First edition of an undergraduate-led academic event promoting pure mathematics within the IME–USP community.	
Elected Student Representative Undergraduate Mathematics Program Committee at IME–USP	2022
<ul style="list-style-type: none">The committee consists of one student and four professors. It is responsible for discussing and enhancing program logistics.	
Volunteer math tutor at Salvaguarda Provided tutoring for Brazilian public high school students	2021–2023
<ul style="list-style-type: none">Salvaguarda is a national program which provides free tutoring for public school students.	

LANGUAGES

- **English:** C1
- **Portuguese:** Native
- **French:** A2, currently learning

REFERENCES

- **Prof. Paulo Domingos Cordaro**
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