

# Bastián Núñez-Boettiger

Santiago, Chile

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## EDUCATION

### MSc in Mathematics

Instituto de Matemáticas, Pontificia Universidad Católica de Valparaíso (IMA-PUCV). (*summa cum laude*)

Valparaíso, Chile

Mar 2022 – Jan 2024

- Thesis: *Continuity of Lyapunov exponents in torus endomorphisms*. (Advisor: Prof. Radu Saghin)
- Relevant coursework: Hyperbolic Dynamics, Ergodic Theory, Numerical Linear Algebra.

### BSc in Mathematics

Universidad de Chile (*summa cum laude*, class rank #1)

Santiago, Chile

Mar 2018 – Jul 2021

- Capstone projects: guided reading of Barreira-Pesin's *Introduction to Smooth Ergodic Theory* (supervised by Prof. Gonzalo Robledo Veloso) and of Bowen's *On Axiom A Diffeomorphisms* (supervised by Prof. Nelda Tamblay).
- Relevant coursework: One-Dimensional Dynamics, seminar on Three-Dimensional Flows and Geometric Lorenz Attractors.

### Bachiller en Ciencias Naturales y Exactas

Universidad de Chile

Santiago, Chile

Mar 2016 – Dec 2017

## PRIZES AND SCHOLARSHIPS

### Jorge Billeke Prize 2022

Academic excellence award conferred each year to a prominent undergraduate by the Mathematical Society of Chile.

SOMACHI, Chile

Dec 9th, 2022

### National Master's Scholarship 2022

Scholarship granted by the Chilean govt. for Master's studies. Placed 7 out of 269 selected (1895 applicants, all areas).

ANID, Chile

2022 – 2023

## SELECTED TALKS

Brin MRC Summer School: Partial Hyperbolicity. *Inverse limits as solenoidal manifolds*.

Jun 1st, 2023

UChile Student Seminar. *What is a Blender?*

Nov 2 2022

IMA-PUCV Graduate Dynamics Seminar, two-part talk. *Axiom A Diffeomorphisms*.

Apr 7-21 2022

UChile, talk for undergraduate students. *Topological Entropy*.

Aug 12 2021

## TEACHING AND SERVICE

### Taller de Razonamiento Matemático 2024, IMA-PUCV

Hired as instructor in charge. Year-long afterschool activity for 10th grade students from diverse socioeconomic backgrounds.

2024

### Instructor, IMA-PUCV

Taught or tutored a total of 4 freshman and sophomore level courses for engineering and education majors.

2024

### T.A., IMA-PUCV

Tutoring for late UG and early graduate courses: Differential Geometry, General Topology, Complex Analysis.

2022 – 2023

### Course notes, Dept. Math. UChile

Hired to transcribe and edit LaTeX notes for first-year Calculus which were then adopted as the department's course notes.

2022

### T.A., Dept. Math. UChile

Tutoring and grading for second and third year UG courses: Multivariable Calculus, Differential Equations, Real Analysis.

2020 – 2021

### Co-organizer, UChile Mathematics Student Seminar

2019 – 2021

## CONFERENCES, WORKSHOPS AND SCHOOLS

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<b>Computational Methods in Dynamical Systems 2024</b>	Hokkaido U., Japan (hybrid) Aug 19th - 23rd, 2024
<b>QuSantiagoIII School on Quantum Control and Quantum Machine Learning</b>	U. Mayor, Chile Aug 12th - 14th, 2024
<b>4th Symposium on Machine Learning and Dynamical Systems</b>	Fields Institute, Canada (hybrid) Jul 8th - 12th, 2024
<b>XCI Encuentro Anual SOMACHI</b>	Chile Dec 18th - 21st, 2023
<b>1st LESET Workshop: Lyapunov Exponents and Smooth Ergodic Theory</b>	Brazil Nov 27th - Dec 1st, 2023
<b>Summer School: Partial Hyperbolicity</b>	Brin MRC, Maryland May 30th - Jun 9th, 2023
<b>AIM Research Community “Big Ideas in Dynamics”</b> Took part in reading group about pathological center foliations (cf. Shub-Wilkinson, 1999).	AIM, California (online) Feb 2023 – May 2023
<b>IMPA Summer Program 2021</b> Enrolled in two MSc level courses, passed with “A” grade: Complex Dynamics, Markov Chains.	IMPA, Brazil (online) Jan 2021 – Feb 2021

## OTHER SKILLS AND INTERESTS

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- Languages: Spanish (native), English (fluent – EF SET C2 Proficient), Portuguese (intermediate).
- Computer: LaTeX, graphics and multimedia editing software, GNU/Linux, Python and SageMath.
- Free time: Music production, hobby electronics and DIY.