
Mauricio Poletti

Ph.D. in Mathematics

Address

Departamento de Matemática
Centro de Ciências
Universidade Federal do Ceará
Ceará - Brazil

Contact: mpoletti@mat.ufc.br

<https://sites.google.com/mat.ufc.br/mpoletti>

Citizenship

Paraguayan. Born in May 15, 1985.

PROFESSIONAL EXPERIENCE

Professor 2019-Present.

Centro de Ciências Universidade Federal do Ceará (Brazil).

EDUCATION

Post-Doctoral Position 2018-2020

Faculté des Sciences d'Orsay Université Paris-Sud (France).

Advisor: Sylvain Crovisier.

Post-Doctoral Position 2017

LAGA - Université Paris 13 (France).

Advisor: Carlos Matheus Silva Santos.

Post-Doctoral Position 2016

IMPA - Instituto de Matemática Pura e Aplicada (Brazil).

Advisor: Marcelo Viana.

Ph.D. in Mathematics. 2012 - 2016

IMPA - Instituto de Matemática Pura e Aplicada (Brazil).

Advisor: Marcelo Viana.

M.Sc. in Applied Mathematics. 2010 - 2012.

IMPA - Instituto de Matemática Pura e Aplicada (Brazil).

Advisor: André Nachbin.

Bachelor Degree in Engineering. 2004 - 2010.

FIUNA - Facultad de Ingeniería de la Universidad Nacional de Asunción (Paraguay).

RESEARCH

Accepted for publication.

- (1) Symbolic dynamics for nonuniformly hyperbolic maps with singularities in high dimension (With Ermerson Araujo and Yuri Lima) *Memoirs of the American Mathematical Society* to appear.
- (2) Random product of quasi-periodic cocycles (with Jamerson Bezerra) *Proceedings of the American Mathematical Society* (2021).
- (3) On the genericity of positive exponents of conservative skew products with two-dimensional fibers (With Davi Obata) preprint *Journal of Dynamics and Differential Equations*(2021).
- (4) Simplicity of Lyapunov spectrum for linear cocycles over non-uniformly hyperbolic systems (with Lucas Backes, Yuri Lima and Paulo Varandas) *Ergodic theory and Dynamical Systems* (2019).
- (5) A Livšic theorem for matrix cocycles over non-uniformly hyperbolic systems (with Lucas Backes) *Journal of Dynamics and Differential Equations* (2018).
- (6) Simple Lyapunov Spectrum for linear cocycles over certain partially hyperbolic maps (with Marcelo Viana) *Nonlinearity* (2018).
- (7) Stably positive Lyapunov exponents for symplectic linear cocycles over partially hyperbolic diffeomorphisms, *Discrete and Continuous Dynamical Systems* (2018).
- (8) Geometric growth of Anosov maps on the 3 Torus, *Bulletin of the Brazilian Mathematical Society* (2018).
- (9) The set of cocycles with small but not vanishing Lyapunov Exponents is open (with Lucas Backes and Adriana Sanchez) *Mathematical Research Letters* (2017)
- (10) Continuity of Lyapunov exponents is equivalent to continuity of Oseledets subspaces (with Lucas Backes) *Stochastic and Dynamics* (2017).

Submitted articles.

- Hölder continuity of the Lyapunov exponents over hyperbolic maps (With Silviu Klein and Pedro Duarte). www.arxiv.org

AWARDS AND FELLOWSHIPS

- Pos doctoral Fellowship at Université Paris-Sud (2018)
- Pos doctoral Fellowship at L.A.G.A. Université Paris-13 (2017)
- CAPES Pos doctoral Fellowship (2016)
- CNPq Ph.D. Fellowship. 2012 - 2016.
- FAPERJ Student Grade A, M.Sc. Fellowship. 2011 - 2012.
- CNPq M.Sc. Fellowship. 2010 - 2011.

INVITED ADDRESSES

- New trends in Lyapunov Exponents, Universidade de Lisboa, Lisboa, Portugal - February 2022.
- 33 Coloquio Brasileiro de Matemática, Ceará, Brazil August 2021
- A Hyperbolic Day Online, February 2021.
- Paroles aux jeunes chercheur-es em géométrie e dynamique GRD Platon, Nancy, France - November 2019.
- Dynamics Beyond Uniform Hyperbolicity, Marseille, France - May 2019.
- Workshop on Dynamical Systems, organized by the Federal University of Alagoas, Maceio, Brazil - July 2018
- School on Hyperbolic Dynamics, Centro di Ricerca Matematica Ennio De Giorgi, Pisa Italy - June 2017.
- International Conference on Dynamical Systems, Búzios, Rio de Janeiro - July 2016.
- Seminario Dinámica Porteña, Valparaiso, Chile - Mayo 2016.
- Workshop de Topologia e Dinamica – 11a edição, IME-UFF, Niteroi - February 2016.
- IV Encontro Mineiro de Sistemas Dinamicos, Uberlandia, Brazil - November 2015.
- Poster Presentation, XXXII CNMAC - Congresso Nacional de Matemática Aplicada e Computacional, Cuiaba, Brazil - September 2009.

TEACHING

At Universidade Federal do Ceará.

- Teoria Ergódica 2020.
- Cálculo diferencial e integral I 2020-2021.
- Cálculo e geometria analítica I 2020-2021.
- Cálculo fundamental 2020-2022.
- Matemática aplicada 2020.

At IMPA.

- Fundamentos de Cálculo-PROFMAT Mar-Jun 2016

At Facultad Politécnica de Universidad Nacional de Asunción.

- Introduction to Analysis in \mathbb{R}^n July 2012
- Introduction to Real Analysis July 2013
- Introduction to Real Analysis July 2014

As Teacher Assistant at IMPA.

- Real Analysis Summer 2011
- Ordinary differential equations Mar-Jun 2012
- Ergodic Theory Ago-Nov 2012
- Basics of Calculus-PROFMAT Mar-Jun 2013
- Measure Theory equations Jul-Nov 2013
- Ordinary differential equations Mar-Jun 2014
- Basics of Calculus-PROFMAT Mar-Jun 2014
- Basics of Calculus-PROFMAT Mar-Jun 2015
- Functional Analysis Summer 2015
- Ergodic Theory Ago-Nov 2015

ADDITIONAL INFORMATION

LANGUAGE.

English Fluently

Spanish Mother tongue

Portuguese Fluently

EXTRACURRICULAR ACTIVITIES.

Staff of the online journal of scientific dissemination *Ciencias del Sur* www.cienciadelsur.com.

Student Representative at the Board of Directors in FIUNA (Faculty of engineering of the Universidad Nacional de Asunción) 2008-2010

REFERENCES

Professor Marcelo Viana
IMPA - Instituto de Matemática Pura e Aplicada
viana@impa.br

Professor Pedro Duarte
Universidade de Lisboa
pmduarte@fc.ul.pt

Professor Carlos Matheus Silva Santos
École Polytechnique
matheus@impa.br

Professor Sylvain Crovisier
Université Paris Sud
sylvain.crovisier@math.u-psud.fr