

Curriculum Vitae

Anibal Velozo

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PERSONAL INFORMATION

Name: Anibal Velozo

Date of birth: February 4th, 1992

Nationality: Chilean

Personal address: 45 Moran Ave, Princeton, NJ 08542 (USA);

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Languages: Spanish (native), English.

EDUCATION

Ongoing **PhD in Mathematics** at Princeton University (expected by May 2018)

- Advisor: Gang Tian.

2011-13 **Master of Science in Mathematics** at Pontifical Catholic University of Chile (PUC).

- Advisor: Godofredo Iommi

2010-13 **Bachelor in Mathematics** at Pontifical Catholic University of Chile (PUC).

RESEARCH INTERESTS

Ergodic Theory, Complex geometry and Symplectic topology.

SCIENTIFIC WORK

1. *Entropy in the cusp and phase transitions for geodesic flows* (joint with G. Iommi and F. Riquelme), To appear in Israel J. Math.
2. *Escape of mass and entropy for geodesic flows* (joint with F. Riquelme), To appear in Ergodic Theory Dynam. Systems.
3. *Phase transitions for geodesic flows and the geometric potential*, arXiv:1704.02562, submitted.
4. *Rate distortion theory, metric mean dimension and measure theoretic entropy* (joint with R. Velozo), arXiv:1707.05762, submitted.
5. *Ergodic theory of geodesic flows*, in preparation.
6. *Measures of maximal entropy for suspension flows* (joint with G. Iommi), in preparation.
7. *Semicontinuity properties of the entropy* (joint with G. Iommi, M. Todd), in preparation.

TEACHING AND OUTREACH

Outreach:

2012 Depute Leader of the Chilean Team on the LIII International Mathematical Olympiad, Argentina.

- 2010- Integrant of the Academic Committee in charge of preparing and grading tests for the Chilean Mathematical Olympiad. Trainer of Chilean teams that participate in international mathematical olympiads.

Grading.

- Fall 2014 Accelerated Honor Analysis (freshman course), Princeton University.
Spring 2015 Multivariable calculus, Princeton University.
Fall 2016 Accelerated Honor Analysis (freshman course), Princeton University.
Spring 2017 Multivariable calculus, Princeton University.

Teaching assistance.

- Fall 2015 Special course 'Introduction to Mathematical Thinking', taught by Keith Devlin (Princeton).
Spring 2013 Advanced Calculus (math department), PUC.
Fall 2012 Complex Analysis (math department), PUC.
Geometry I (Education department), PUC.
Spring 2012 Elementary Number Theory (math department), PUC.
Fall 2011 Complex Analysis (math department), PUC.

Teaching

- Jan 2015 Ordinary Differential Equations for Engineering School, PUC.
Spring 2015-16 Multivariable calculus, Princeton University.
Fall 2017-18 Calculus I, Princeton University.

FELLOWSHIPS AND ACADEMIC HONORS

- 2017 Graduate Student Teaching Award, Graduate School, Princeton University.
2016 Graduate Student Teaching Award, Department of Mathematics, Princeton University.
2013-17 Scholarship for studying PhD in Mathematics, Department of Mathematics, Princeton University.
2010-13 Scholarship Rolando Chuaqui (best student of generation), Department of Mathematics, PUC.
2009 Perfect Score on the Chilean equivalent of the SAT, Mathematic PSU Test.
Highschool Mathematical Olympiads
 - *International Mathematical Olympiad*: Silver medal (Spain 2008), Silver medal (Germany 2009).
 - *Iberoamerican Mathematical Olympiad*: Silver medal (Brazil 2008), Bronze medal (Mexico 2009).
 - *Southern Cone Mathematical Olympiad*: Gold medal (Chile 2008).
 - *Chilean Mathematical Olympiad*: Gold medal (2007, 2008, 2009).

CONFERENCES ATTENDED

- Jun 2016 Workshop on Symplectic Geometry and Mathematical Physics, Beijing University, China.
Jul 2015 International Congress of Mathematical Physics; Chile.
May 2013 Non-positive curvature, isometric actions, and dynamics of cocycles; Chile.
Apr 2012 AGRA, Arithmetic, groups and analysis; University of Santiago of Chile.
Aug 2011 ELGA, School of Algebraic Geometry; Argentina.
Nov 2011 LXXX Annual Meeting of the Mathematical Society of Chile.

TALKS AND ORGANIZED SEMINARS

- 2014-15 Organizer of Graduate Student Seminar (GSS) at Princeton University.
2014-15 Organizer of Informal Symplectic Geometry Seminar at Princeton University.
2011-13 Organizer of Undergraduate Student Seminar at Pontifical Catholic University of Chile.
June 2017 Entropy theory for geodesic flows, PUC (Chile).
April 2018 TBD, Université de Nantes (France).
April 2018 TBD, Université de Rennes (France).