

# Daniel Blanquicett Tordecilla

quicetor@impa.br



## EDUCATION

Ph.D. in Mathematics (In progress) Instituto Nacional de Matemática Pura e Aplicada (IMPA)	2015-2019
MA in Mathematics Instituto Nacional de Matemática Pura e Aplicada	2013-2015
BA in Mathematics Universidad de Córdoba (Colombia)	2007-2011

## RESEARCH INTERESTS

- Combinatorics, Graph Theory, Probability, and Statistical Physics.
- Currently (2018) focused on bootstrap percolation and its applications, for example, to the Glauber dynamics of the Ising model. Under the supervision of Professor Rob Morris.
- Interested in topics related to phase transitions in random simplicial complexes.

## TEACHING EXPERIENCE

<b>Teaching assistant at IMPA</b> Mathematical methods in finance, PDEs in finance, Probability, Real analysis, Linear PDE theory, Markov Chains, Analysis in $\mathbb{R}^n$	2015-2018
<b>Assistant Professor at the Universidad de Córdoba</b> Differential, Integral and Vector Calculus, ODEs	2012-2012
<b>Teaching assistant at the Universidad de Córdoba</b> Analytic Geometry, Calculus, Linear Algebra, ODEs, PDEs	2009-2011

## PREPRINTS

- Anisotropic three dimensional bootstrap percolation. *In preparation.*
- Fixation for two-dimensional  $\mathcal{U}$ -voter dynamics. *In preparation.*

## GRANTS

- CAPES, R\$2.200 2015-2019
- CNPq, R\$1.500 2013-2015

## CONFERENCE PRESENTATIONS

- IMPA Seminar. Markov Chains and Ergodicity Jun 2016  
<http://seminariosimpa.br/visualizar?id=6789>
- IMPA Course. O Teorema de Russo-Margulis Jun 2015  
<http://videoimpa.br/index.php?page=processos-estocasticos-2015>
- IMPA Course. Percolação na Rede Triangular May 2015  
<http://videoimpa.br/index.php?page=processos-estocasticos-2015>

## PARTICIPATION AT CONFERENCES AND SEMINARS

- ICM 2018. Rio de Janeiro. 2018.
- ICM 2018 Satellite meeting, Combinatorics: Extremal, Probabilistic and Additive. USP, São Paulo. 2018.
- Introductory Workshop: Geometric and Topological Combinatorics. MSRI, Berkeley. 2017.
- Summer School on Random Graphs and Probabilistic Methods. The Fields Institute for Research in Mathematical Sciences, Toronto. 2017.
- IMPA-Bath Workshop in Mathematics. IMPA, Rio de Janeiro. 2017.
- Workshop on First-Passage Percolation. Cabo Frio. 2014.

- 29o Colóquio Brasileiro de Matemática. IMPA, Rio de Janeiro. 2013.
- Combinatorics, Number Theory and Dynamical Systems. IMPA, Rio de Janeiro. 2013.
- Conservative Dynamics and Symplectic Geometry. IMPA, Rio de Janeiro. 2013.
- Symmetries in Mathematics and Physics II. IMPA, Rio de Janeiro. 2013.

## LANGUAGES

- English: Fluent.
- French: Intermediate.
- Portuguese: Fluent.
- Spanish: Mother tongue.

## REFERENCES

- **Prof. Dr. Robert Morris.** (Ph.D. advisor) IMPA, Brazil; rob@impa.br
- **Prof. Dr. Roberto Imbuzeiro Oliveira.** IMPA, Brazil; rimfo@impa.br
- **Prof. Dr. Augusto Teixeira.** IMPA, Brazil; augusto@impa.br
- **Prof. Dr. Jorge Passamani Zubelli.** IMPA, Brazil; zubelli@impa.br