

## Education

- 2016** PhD Mathematics, The University of Warwick.  
Thesis title: Entry times, escape rates and smoothness of stationary measures.
- 2011** Mathematical Engineering, Universidad de Chile.  
Thesis title: Randomized probability measures by permutative not algebraic cellular automata.

## Teaching Records

### Lecturer

- 2017** Ordinary Differential Equations. Universidad de Chile.  
Foundations. Universidad Adolfo Ibañez.  
Introduction to Calculus. Universidad Técnica Federico Santa María.  
Integration. Universidad Técnica Federico Santa María.
- 2016** Linear Algebra. Universidad Adolfo Ibañez.

### Teaching Assistant

- 2012** Functional Analysis I. The University of Warwick.
- 2010** Calculus. Universidad de los Andes.  
Multivariate Calculus. Universidad de los Andes.  
Optimization. Universidad de los Andes.
- 2008** Ordinary Differential Equations. Universidad de Chile.  
Single Variable Calculus. Universidad de Chile.
- 2006** Introduction to Algebra. Universidad de Chile.

### Supervisor

- 2011** Second year students in Advanced Linear Algebra, Vector Analysis, Analysis III, Algebra II and Metric Spaces. The University of Warwick.

## Research Projects

- 2017** Research Asst. Project: Supervision and Optimal Control on mining waste sites. FONDEF.
- 2017** Research Asst. Project: Tailing Dams-developing technologic tools for monitoring at tailings dams. Programa Minería Alta Ley.

## Publications

**2016** M. Pollicott, I. Cipriano, The Wasserstein distance between stationary measures associated to iterated function schemes on the unit interval, submitted.

I. Cipriano, The smoothness of the stationary measures, submitted, available on <https://arxiv.org/abs/1607.02680>

I. Cipriano, The Wasserstein distance between stationary measures associated to iterated function schemes on the unit interval, submitted.

**2015** I. Cipriano, A Large deviation and an escape rate result for special semi-flows, submitted, available on <https://arxiv.org/abs/1607.02557>

I. Cipriano, Escape rate for special semi-flows over non-invertible subshifts of finite type, submitted, available on <https://arxiv.org/abs/1607.01481>

I. Cipriano, Entry time statistics to different shrinking sets, Stochastics and Dynamics, doi: 10.1142/S0219493717500241

## Scientific Divuligation

**2016-present** Blog dedicated to Maths divulgation (some articles only in Spanish): <https://icipriano.wordpress.com/>

## Talks

“Telescopic product measures” (11th and 18th Oct 2016), Grupo de estudio en dinámica, Pontificia Universidad Católica de Chile.

“The Wasserstein distance between stationary measures” (7th Apr 2016), Seminario dinámica, Pontificia Universidad Católica de Chile.

“About Maths” (17th Nov 2015), Scuola Italiana de Santiago.

“How smooth are the stationary measures?” (30th Oct 2015), Dinámica Portena, Pontificia Universidad Católica de Valparaíso.

“Entry time statistics to different shrinking sets” (5th Oct 2015), Seminario dinámica, Pontificia Universidad Católica de Chile.

“Large Deviations” (17th Aug 2015), Young Research Meeting, University of Oxford.

“Some spectral properties of the Perron Frobenius operator in one dimensional dynamics” (29th Jan 2014), Postgraduate Seminar, University of Warwick.

## **Honors and Awards**

**2015** Scholarship for PhD.

**2006** Best swimmer, Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile.

**2005** Outstanding student, Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile.

## **Other**

### **Languages**

Spanish, English, Italian.

### **Certifications**

**2016** Machine Learning by Stanford University on Coursera.

**2016** Algorithmic Toolbox by University of California, San Diego & Higher School of Economics on Coursera.

### **Skills**

Python, Matlab, Latex, mathematical modeling, applied mathematics, algorithms, statistics, mathematical education, university teaching, optimization.

### **Engineering internships**

**Feb 2009** Micomo, Mining Information Communication and Monitoring S.A.

**Jan 2009** Honeywell, Kairos Mining S.A.

**Jan 2008** IM2, Instituto de Innovación en Minería y Metalurgia.