

# Lisandro Javier, Fermín

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## Personal data

**Birth date:** 29/03/1977

**Professional address :**

CIMFAV, Facultad de Ingeniería

Universidad de Valparaíso

General Cruz, 222

Valparaíso - CHILE

**telephone:** +56(32)2603624

**e-mail:** lisandro.fermin@uv.cl

## Professional data

2012— **Associate Professor**, at CIMFAV, FacIng., Universidad de Valparaíso, Chile.

2011–2012 **Assistant Professor**, at CIMFAV, FacIng., Universidad de Valparaíso, Chile.

2009–2011 **Postdoctoral Fellow**, at Regularity Team of INRIA-Saclay, France.

2008–2009 **ATER**, at Université Paris V Descartes, Francia.

2007–2008 **ATER**, at Université Paris Sud XI, Francia.

2006–2007 **Teacher Assistant**, at Universidad Central de Venezuela.

2002–2004 **Junior Research Engineer**, at INTEVEP-PDVSA, Venezuela.

1999–2006 **Teacher Assistant**, at Universidad Central de Venezuela.

## Education

2004–2008 **Ph.D in Mathematics**, Université Paris-Sud XI, France.

Thesis: *Aggregation of stochastic processes, disaggregation and long memory.*

Adviser: Didier Dacunha-Castelle, Emeritus Professor Professor at Université Paris-Sud XI, and José R. Leon, Full Professor at Universidad Central de Venezuela.

2000–2002 **Master in Stochastic Models**, Universidad Central de Venezuela.

Thesis: *Signals characterizations by means of a multifractal formalism based in the wavelet transform modulus maxima.*

Adviser: Wilfredo Urbina (Professor at De Paul University - Chicago), and Nelson D. Marquez, (Professor at London University).

1994–1999 **Bachelor of Science in Mathematics**, Universidad Central de Venezuela.

Thesis: *Simulations and classifications of pressures trajectories in extraction petroleum models.*

Adviser: Ricardo Rios, Professor at Universidad Central de Venezuela.

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## Awards and fellowships

- 2005–2008 **Fellowship of Excellence Eiffel, France.**
- 2000–2002 **Fellowship CDCH-UCV, Universidad Central de Venezuela.**
- 1999– **MagnaCumLaude Bachelor of Science in Mathematic, Universidad Central de Venezuela.**

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## Ongoing funded research projects

- 2016-2017 **MATHAMSUD-CONICYT**, *Statistical inference for dependent stochastic processes and application in renewable energy.* Código 16-MATH-03 SIDRE, Co-Investigadores..
- 2011-2023 **InnovaChile CORFO**, *Atracción de Centros Internacionales a Chile bajo el nombre de CIRIC. (Fase 1 y 2)*, Investigador.

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## Projects in the last 5 years

- 2012-2014 **DIUV**, *Modelización estocástica de la no-adherencia a regímenes de medicación*, Universidad de Valparaíso.
- 2012-2013 **FIC Regional CONICYT**, *Generación de estrategias para la sustentabilidad hídrica de la Provincia de Petorca bajo escenarios de cambio climático*, FIC.
- 2012-2015 **Innova Chile CORFO - Chilquinta**, *Sistema georreferenciado de pronóstico de riesgo para la distribución eléctrica asociado a eventos meteorológicos extremos.*
- 2012-2015 **Anillo - CONICYT**, *Red de Análisis Estocástico y Aplicaciones (sistemas abiertos, energía y dinámica de la información).*
- 2009-2012 **ANIFRAC**, *Uncertainties in processes with fractal characteristics*, DIGITEO DIM.

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## Publications

- 2017 **L. Fermín, R. Ríos and L.A. Rodríguez**, *A Robbins-Monro algorithm for non-parametric estimation of NAR process with Markov-Switching: consistency*, Journal of Time Series Analysis, DOI: 10.1111/jtsa.12237..
- 2017 **L. Fermín and J. Lévy-Véhel**, *Variability and Singularity Arising From Poor Compliance in a Pharmacokinetic Model II: The Multi-Oral Case*, Journal of Mathematical Biology, 74(4), pp 809–841.  
doi:10.1007/s00285-016-1041-1
- 2016 **L. Fermín, R. Ríos and L. Rodríguez**, *Modelos de Markov Ocultos.*, XXIX Escuela Venezolana de Matemáticas, EMALCA–VENEZUELA, pp 1-123. Ediciones IVIC, ISBN 978-980-261-169-0.
- 2006 **D. Dacunha-Castelle and L. Fermín**, *Aggregation of doubly stochastic interactive Gaussian processes and Toeplitz forms of U-statistics*, Dependence in Probability and Statistics. Lecture Notes in Statistics, 187, Eds. Bertail P., Doukhan P. et Soulier P., 287-302.
- 2006 **D. Dacunha-Castelle and L. Fermín**, *Disagregation of long memory processes on  $C^\infty$  class*, Electronic Communications in Probability, 11, 35-44.