

# CLAUDIO LANDIM

*Date/place of birth* 28th January, 1965, Rio de Janeiro, Brazil  
*Affiliation* Instituto de Matemática Pura e Aplicada  
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*Fields of interest* Stochastic processes; Interacting Particle Systems; Large Deviations; Statistical Physics

## EDUCATION

1996 Habilitation à Diriger des Recherches, Université de Rouen  
1990 PhD in Mathematics, Université Paris VII  
1986 MSc in Mathematics, Instituto de Matemática Pura e Aplicada (IMPA)  
1985 Graduação em Matemática, Pontifícia Universidade Católica, Rio de Janeiro, Brazil.

## ACADEMIC POSITIONS

*since 2000* Researcher, IMPA  
*1994 – 2000* Associate Researcher, IMPA  
*1990 – 2002* Chargé de Recherches, CNRS, UMR 6085  
*1988 – 1990* Allocataire d'Enseignement et de Recherches, Université de Rouen

## PRIZES & DISTINCTIONS

2016 Medalha Juscelino Kubitschek.  
2010 Fellow of the The World Academy of Sciences (TWAS)  
2010 Comendador da Ordem Nacional do Mérito Científico.  
2006 The World Academy of Sciences (TWAS) Prize in Mathematics.  
2004 John S. Guggenheim Memorial Foundation Fellow.  
2002 Fellow of the Brazilian Academy of Sciences.  
1997 Bronze Medal, CNRS, France.

## SUPERVISION OF PHD STUDENTS

*at IMPA* Ricardo Misturini [2014]; Bruno dos Santos Gois [2014]; Adriana Neumann de Oliveira [2011]; Tertuliano Franco Santos Franco [2011]; Fábio Julio da Silva Valentim [2010]; Alexandre de Bustamante Simas [2010]; Freddy Rolando Hernandez [2010]; Jonathan Farfan [2008]; Ana Patrícia Carvalho Gonçalves [2007]; Johel Beltrán [2005]; Jeronimo Monteiro Noronha Neto [2004]; Milton David Jara Valenzuela [2004]; Glauco Valle da Silva Coelho [2003]; Raquel Mariela Sued [2003]; Gonzalo Panizo [2001]  
*at U. Rouen* Nicolas Lanchier [2005]; Elise Janvresse [1998]; Abdelatif Koukkous [1997]

## SELECTED TALKS

- 08/2018 Invited Talk, International Congress of Mathematicians, Rio de Janeiro.  
03/2016 Kai Lai Chung Lecture, University of Maryland.  
07/2014 Lévy Lecture, 34th Conference on Stochastic Processes and their Applications, Osaka.

## FURTHER ACTIVITIES (SELECTION)

- Editor* AEA, Latin American Journal of Probability and Mathematical Statistics [2005 – 2012]; Revista Matemática Universitária [1999–2001]
- Associate Editor* Probability Theory and Related Fields [2015–2017]; Electronic Journal of Probability and Electronic Communications of Probability [2015–2017]; AEA, Latin American Journal of Probability and Mathematical Statistics [2013–2018]; Journal of Statistical Physics [2000–2002 and 2013–2018]; Annales de la Faculté des Sciences de Toulouse [2003–2006]; Stochastic Processes and their Applications [1999–2006]
- Administrative* Deputy Director, IMPA [2008 – present]; President of the Latin-American Society of Probability and Mathematical Statistics - SLAPEM [2009–2012]; Member of the Committee for Conferences on Stochastic Processes of the Bernoulli Society [2003 – 2006]; Member of the Administration Council of IMPA [2000 – 2006]; Vice-president of the Brazilian Mathematical Society [1999–2000]

## SELECTED PUBLICATIONS

- [1] C. Landim, I. Seo. Metastability of Nonreversible Random Walks in a Potential Field and the Eyring-Kramers Transition Rate Formula. *COMM PURE APPLIED MATH* 71, 203–266 (2018)
- [2] J. Beltrán, M. Jara, C. Landim. A martingale problem for an absorbed diffusion: the nucleation phase of condensing zero range processes. *PROBAB TH REL FIELDS* 169, 1169–1220 (2017)
- [3] L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim. Macroscopic fluctuation theory. *REVIEWS OF MODERN PHYSICS* 87, 593–636 (2015).
- [4] J. Beltrán, C. Landim. A Martingale approach to metastability. *PROBAB TH REL FIELDS* 161, 267–307 (2014).
- [5] C. Landim. Metastability for a non-reversible dynamics: The evolution of the condensate in totally asymmetric zero range processes. *COMM MATH PHYS* 330, no. 1, 1 – 32 (2014).
- [6] M. Jara, C. Landim, A. Teixeira. Quenched scaling limits of trap models. *ANNALS PROBAB* 39, no. 1, 176–223 (2011).
- [7] T. Franco, C. Landim. Hydrodynamic limit of gradient exclusion processes with conductances. *ARCHIV RAT MECH ANAL* 195, no. 2, 409 –439 (2009).
- [8] C. Kipnis, C. Landim. Scaling Limits of Interacting Particle Systems. *GRUNDLEHREN DER MATHEMATISCHEN WISSENSCHAFTEN* 320, Springer-Verlag Berlin Heidelberg (1999).
- [9] C. Landim, H.T. Yau. Fluctuation-dissipation equation of asymmetric simple exclusion processes. *PROBAB TH REL FIELDS* 108, no. 3, 321–356 (1997).
- [10] C. Landim, S. Sethuraman, S.R.S. Varadhan. Spectral gap for zero-range dynamics *ANNALS PROBAB*, 24, no. 4, 1871–1902 (1996).