

Claudio Landim

Education

- 1982 - 1985 Graduate Studies, Dept. of Mathematics, PUC-Rio.
- 1985 - 1986 Master, IMPA
- 1986 - 1990 Ph. D., Université Paris VII
- 1996 - 1996 Habilitation à Diriger des Recherches, Université de Rouen

Positions

- 1985 - 1986 Research Assistant, IMPA
- 1988 - 1990 Allocataire d'Enseignement et de Recherches, U. Rouen
- 1990 - 2002 Chargé de Recherches, CNRS, UMR 6085
- 1994 - 2000 Associate Researcher, IMPA
- 2000 - Present Researcher, IMPA

Prizes and Distinctions

- Bronze Medal, CNRS, France 1997
- Fellow of the Brazilian Academy of Sciences, 2000.
- John S. Guggenheim Memorial Foundation Fellow, 2004.
- Mention de Honor, II Congreso Latinoamericano de Matemáticos 2004.
- The World Academy of Sciences (TWAS) Prize in Mathematics 2006
- Invited lecture at the International Congress on Mathematical-Physics 2006.
- Lévy Lecture, 34th Conference on Stochastic Processes and their Applications, Osaka, Japan, 2010.
- Fellow of the The World Academy of Sciences (TWAS), 2010.
- Comendador da Ordem Nacional do Mérito Científico, 2010
- Kai Lai Chung Lecture, Seminar on Stochastic Processes, University of Maryland, USA, 2016
- Medalha Juscelino Kubitschek, 2016
- Invited lecture at the International Congress of Mathematicians 2018 (ICM 2018). Probability section and Mathematical Physics section.
- Science Education Prize 2019: “Development of Scientific Educational Material”, TWAS LACREP.

Ph. D. Students

1. **Abdelatif Koukkous**, Université de Rouen 1997. Hydrodynamic behavior of symmetric zero-range processes with random rates. *Stoch. Proc. Appl.* **84**, 297, (1999)
2. **Elise Janvresse**, Université de Rouen 1998. First order correction for the hydrodynamic limit of symmetric simple exclusion processes with speed change in dimension $d > 2$. *Annals Probab.* **26**, 1874–1912, (1998).
3. **Gonzalo Panizo**, IMPA 2001. Spectral gap and logarithmic Sobolev inequality for unbounded conservative spin systems. *Annales de l'Institut Henri Poincaré, Prob. et Stat.* **38**, 739-777, (2002).
4. **Raquel Mariela Sued**, IMPA 2003. Regularity of the diffusion coefficient of the mean-zero asymmetric simple exclusion process. *Ann. Inst. H. Poincaré Probab. Statist.* **41**, 1–33, (2005). Received the prize "Francisco Aranda Ordaz" given by the Regional Latinoamericana de la Sociedad Bernoulli to the best thesis in probability defended by a Latin-American between 2001 and 2003.
5. **Glauco Valle da Silva Coelho**, IMPA 2003. Evolution of the interface in a two dimensional Potts model. *Commun. Math. Phys.* **249**, 215–247, (2004).
6. **Milton David Jara Valenzuela**, IMPA 2004. Finite dimensional approximations of the diffusion coefficient. *Annals Probab.* **34**, (2006), *Ann. Inst. H. Poincaré Probab. Statist.* **42**, 567 – 577 (2006).
7. **Jeronimo Monteiro Noronha Neto**, IMPA 2004. Poincaré and Logarithmic Sobolev Inequality for Ginzburg-Landau Processes in Random Environment. *Probab. Th. Rel. Fields.* **131**, 229-260, (2005).
8. **Johel Beltrán**, IMPA 2005. Regularity of diffusion coefficient for nearest neighbor asymmetric simple exclusion on \mathbf{Z} . *Stoch. Proc. Appl.* **115**, 1451-1474, (2005)
9. **Nicolas Lanchier**, Rouen 2005. Systèmes de particules multicolores. Phase transitions and duality properties of a successional model. *Adv. Appl. Probab.* **37**, 265-278, (2005). Multitype contact process with frozen states: a spatial model of allelopathy. *J. Appl. Probab.* **42**, 1109-1119 (2006). With Belhadji: Individual versus cluster recoveries within a spatially structured population. *Ann. Appl. Probab.* **16**, 403-422 (2006). With

Neuhauser: Stochastic spatial models of host-pathogen and host-mutualist interactions. *Ann. Appl. Probab.* **16**, 448-474 (2006).

10. **Ana Patrícia Carvalho Gonçalves**, IMPA 2007. Central limit theorem for a tagged particle in the asymmetric simple exclusion process. *Stoch. Proc. Appl.* **118**, 472–502, (2008)
11. **Jonathan Farfan**, IMPA 2008. Stationary large deviations for boundary driven interacting particle systems. *Stochastic Process. Appl.* **121** 725–758 (2011).
12. **Freddy Rolando Hernandez**, IMPA 2010. Equilibrium fluctuations for a non-gradient energy conserving stochastic model.
13. **Alexandre de Bustamante Simas**, IMPA 2010. Hydrodynamic behavior of boundary driven stochastic lattice gas models and interacting particle systems with conductances in random environments. *Journal of Statistical Physics* **139**, 658-685 (2010); *Stochastic Processes and their Applications* **120**, 1535-1562 (2010).
14. **Fábio Julio da Silva Valentim**, IMPA 2010. Scaling limits: d -dimensional models with conductances, velocity, reservoirs and random environment. *Journal of Mathematical Analysis and Applications* **382**, 214–230 (2011); *Annales de l’Institut Henri Poincaré, Prob. et Stat.*
15. **Tertuliano Franco Santos Franco**, IMPA 2011. Hydrodynamic limit of gradient exclusion processes with conductances. *Arch. Ration. Mech. Anal.* **195** 409–439 (2010).
16. **Adriana Neumann de Oliveira**, IMPA 2011. Hydrodynamical limit and large deviations principle for exclusion processes with slow bonds. *J. App. Probab.* **49**, 333-351 (2011), *Annales de l’Institut Henri Poincaré, Prob. et Stat.*
17. **Bruno dos Santos Gois**, IMPA 2014. Zero-temperature limit of the Kawasaki dynamics for the Ising lattice gas in a large two-dimensional torus. *Ann. Probab.* (2014)
18. **Ricardo Misturini**, IMPA 2014. Evolution of the ABC model among the segregated configurations in the zero-temperature limit *Annales de l’Institut Henri Poincaré, Prob. et Stat.* (2014).
19. **Paul Lemire**, Rouen 2018. Metastability of the two-dimensional Blume-Capel model with zero chemical potential and small magnetic field. *J. Stat. Phys.* **164**, 346–376 (2016) and Metastability of the two-dimensional Blume-Capel model with zero chemical

- potential and small magnetic field on a large torus. arXiv:1806.07631 (2018).
20. **Tiecheng Xu**, IMPA 2019. Metastability of finite state Markov chains: a recursive procedure to identify slow variables for model reduction. *ALEA Lat. Am. J. Probab. Math. Stat.* **13**, 725–751 (2016), and Stationary states of boundary driven exclusion processes with nonreversible boundary dynamics. *J. Stat. Phys.* **171**, 599–631 (2018).
 21. **Enrique Idael Chavez Sarmiento**, IMPA 2019. A correction to the hydrodynamic limit of boundary driven exclusion processes in a super-diffusive time scale. *J. Stat. Phys.* **163**, 1079–1107 (2016) and From coalescing random walks on a torus to Kingman’s coalescent.(2019)

Administrative Charges

- Vice-president of the Brazilian Mathematical Society 1999–2000.
- Member of the Administration Council of IMPA 2000 – 2006
- Chair of the Master in Finance of IMPA 2000 – 2003
- Member of the Committee for Conferences on Stochastic Processes of the Bernoulli Society 2003 – 2006
- Chair of the Teaching Department, IMPA, 2004 – 2008
- Coordinator in Mathematics, FAPERJ, 2008-2012
- President of the Latin-American Society of Probability and Mathematical Statistics - SLAPEM, 2009–2012
- Coordinator of the Brazilian Mathematical Olympiads for Public Schools (OBMEP), 2011 – present
- Deputy Director, IMPA, 2008 – present
- Member of the Committee for Conferences on Stochastic Processes of the Bernoulli Society 2018 – 2021

Editorial Activities

- Editor
 - Revista Matemática Universitária, 1999–2001
 - ALEA, Latin American Journal of Probability and Mathematical Statistics, 2005 – 2012.
- Associate Editor
 - ALEA, Latin American Journal of Probability and Mathematical Statistics, 2013–2018
 - Annales de la Faculté des Sciences de Toulouse, 2003 – 2006
 - Bulletin of the Brazilian Mathematical Society, 2018–present
 - Electronic Journal of Probability and Electronic Communications of Probability, 2015–2020
 - Journal of Statistical Physics, 2000–2002 and 2013–2018
 - Probability Theory and Related Fields, 2015–2020
 - Stochastic Processes and their Applications, 1999–2006.
 - IMPA’s Monographs, 2017 – present.

Conference Organization

- 3rd Brazilian School of Probability, Mambucaba, 1998.
- 23th Colóquio Brasileiro de Matemática, IMPA, 2001.
- 29th Conference on Stochastic Processes and their Applications and 7th Brazilian School of Probability. Angra dos Reis, 2003.
- Chair of the 24th Colóquio Brasileiro de Matemática, Rio de Janeiro, 2003.
- Co-organizer of Large scale dynamics, August 29 - September 4, 2004 Oberwolfach, Germany.
- Scientific Committee, Large scale behaviour of interacting particles systems: fluctuations and hydrodynamics, 22-26 August 2005, Budapest, Hungary.
- Scientific Committee, Large scale stochastic dynamics and interaction with kinetic theory, June 11-15 2006, Heraklion, Greece.
- Co-organizer of Large scale dynamics, August 26 - September 1, 2007, Oberwolfach, Germany.
- Co-organizer of Large scale dynamics, November 7 - November 13, 2010, Oberwolfach, Germany.
- Chair of the 28th Colóquio Brasileiro de Matemática, Rio de Janeiro, 2011.
- Chair of the 15th Brazilian School of Probability, Mambucaba, July 31 - August 06, 2011
- Scientific Committee, XII CLAPEM – Latin American Congress in Probability and Mathematical Statistics, Valparaiso, Chile, March 26-30 2012
- Scientific Committee, 36th Conference on Stochastic Processes and their Applications, Boulder, University of Colorado, USA, July 29 - August 2, 2013
- Organizer of a Session in Inhomogeneous Random Systems, Institut Henri Poincaré, Paris, January 22-23, 2013
- Scientific Committee, Stochastic Methods in Finance and Physics. Heraklion, Greece, July 15 – 19, 2013
- Scientific Committee, 29th Colóquio Brasileiro de Matemática, Rio de Janeiro, July 2013.
- Co-organizer of Large scale dynamics, Oberwolfach, Germany, October 27 - November 2, 2013
- Co-organizer and chair of the Scientific Committee of Rencontres Mathématiques de Rouen, June 18–20 2014.
- Organizer of an Invited Session – 37th Conference on Stochastic Processes and Their Applications, Buenos Aires, Argentina, July 28 - August 1, 2014

- Co-chair, 18th Brazilian School of Probability, Mambucaba, August 3 – 9, 2014
- Scientific Committee, 30th Colóquio Brasileiro de Matemática, Rio de Janeiro, July 2015
- Co-chair, 21th Brazilian School of Probability, IMPA, August 3 – 9, 2017
- Scientific Committee, 31th Colóquio Brasileiro de Matemática, Rio de Janeiro, July 2017
- Co-chair, 22th Brazilian School of Probability, PUC-Rio, July 28 – 31, 2018
- Scientific Committee, 32th Colóquio Brasileiro de Matemática, Rio de Janeiro, July 2019

Publications

1. C. Landim; Hydrodynamical Equation for Attractive Particle Systems on \mathbb{Z}^d . *The Annals of Probability* **19**, 1537-1558, (1991).
2. C. Landim; Hydrodynamical limit for Attractive Particle Systems on \mathbb{Z}^d , *Annales de l'Institut Henri Poincaré, Probabilités et Statistiques*, **27**, 559-581, (1991).
3. C. Landim; An overview on large deviations of interacting particle systems. *Annales de l'Institut Henri Poincaré, Physique Théorique*, **55**, 615-635, (1991).
4. C. Landim; Occupation Time Large Deviations of the Symmetric Simple Exclusion Process. *The Annals of Probability* **20**, 206-231, (1992).
5. C. Landim; Large fluctuations for Markov processes: an application in interacting particles systems. En "Probabilistic Methods in Mathematical Physics", édité par F. Guerra, M. I. Loffredo et C. Marchioro, World Scientific, (1992).
6. G. Jona-Lasinio, C. Landim, M. E. Vares; Large deviations for a reaction-diffusion model, *Probability Theory and Related Fields* **97**, 339-361, (1993).
7. C. Landim; Conservation of local equilibrium of attractive particle systems on \mathbb{Z}^d , *The Annals of Probability* **21**, 1782-1808, (1993).
8. C. Landim; Hydrodynamical limit for mean zero asymmetric zero range processes. En "Cellular Automata and Cooperative Systems", édité par N. Boccara, E. Goles, S. Martinez et P. Picco. Kluwer Academic Publishers (1993).
9. P. A. Ferrari, J. A. Galves, C. Landim; Exponential waiting time for a big gap in a one dimensional zero range process, *The Annals of Probability*, **22**, 284-288, (1994).
10. C. Landim, M. E. Vares; Equilibrium fluctuation for exclusion process with speed change, *Stochastic Processes and their Applications* **52**, 107-118, (1994).
11. C. Kipnis, C. Landim, S. Olla; Hydrodynamical limit for a non-gradient model: the generalized exclusion process. *Communications on Pure and Applied Mathematics* **47**, 1475-1545, (1994).

12. O. Benois, C. Kipnis, C. Landim; Large deviations from the hydrodynamical limit for mean zero asymmetric zero range processes. *Stochastic Processes and their Applications* **55**, 65–89, (1995).
13. C. Landim, H. T. Yau; Large deviations for interacting particle systems in infinite volume. *Communications on Pure and Applied Mathematics* **48**, 339–379, (1995).
14. C. Kipnis, C. Landim, S. Olla; Macroscopic properties of a stationary non–equilibrium distribution for a non–gradient interacting particle system. *Annales de l’Institut Henri Poincaré, série B*, **31**, 191–221, (1995).
15. C. Landim; Hydrodynamical limit for space inhomogeneous one dimensional totally asymmetric zero range processes. *The Annals of Probability* **24**, 599–638, (1996).
16. I. Benjamini, P. A. Ferrari, C. Landim; Asymmetric processes with random rate. *Stochastic Processes and their Applications* **61**, 181–204, (1996).
17. C. Landim, M. E. Vares; Exponential estimate for reaction–diffusion models. *Probability Theory and Related Fields* **106**, 151–186, (1996).
18. C. Landim, S. Olla, H. T. Yau; Some properties of the diffusion coefficient for asymmetric simple exclusion processes. *The Annals of Probability* **24**, 1779–1807, (1996).
19. D. Gabrielli, G. Jona–Lasinio, C. Landim; Onsager reciprocity relations without microscopic reversibility. *Physical Review Letters* **77**, 1202–1205, (1996).
20. C. Landim, S. Sethuraman, S. R. S. Varadhan; Spectral gap for zero range dynamics. *The Annals of Probability* **24**, 1871–1902, (1996).
21. C. Landim, S. Olla, H. T. Yau; First order correction for the hydrodynamic limit of asymmetric simple exclusion processes in dimension $d \geq 3$. *Communications on Pure and Applied Mathematics* **50**, 149–203, (1997).
22. C. Landim, M. Mourragui; Hydrodynamic limit of mean zero asymmetric zero range processes in infinite volume. *Annales de l’Institut H. Poincaré, Prob. et Stat.*, **33**, 65–82, (1997).
23. D. Gabrielli, G. Jona–Lasinio, C. Landim, M. E. Vares; Microscopic reversibility and thermodynamic fluctuations. In “Boltzmann’s Legacy 150 years after his birth” Roma, 1994, *Atti dei*

- Convegni Licei **131** 79–88 , Accademia Nazionale dei Lincei, Roma, (1997)
24. C. Landim, H. T. Yau; Fluctuation–dissipation equation of asymmetric simple exclusion processes. *Probability Theory and Related Fields* **108**, 321–356, (1997).
 25. L. Bertini, C. Landim, S. Olla; Derivation of Cahn–Hilliard equations from Ginzburg–Landau models. *Journal of Statistical Physics* **88** 365–381, (1997).
 26. O. Benois, A. Koukkous, C. Landim; Diffusive behaviour of asymmetric zero range processes. *Journal of Statistical Physics* **87**, 577–591, (1997).
 27. C. Landim, S. Olla, S. Volchan; Driven Tracer Particle and Einstein Relation in One Dimensional Symmetric Simple Exclusion Process. *Resenhas do IME-USP* **3**, 173–209, (1997).
 28. C. Landim, S. Olla, H. T. Yau; Convection–Diffusion equation with space–time ergodic random flow. *Probability Theory and Related Fields* **112**, 203–220, (1998).
 29. Landim C., Olla S., Volchan S.; Driven tracer particle in one dimensional symmetric simple exclusion process nearest neighbor symmetric simple exclusion process. *Communications in Mathematical Physics* **192**, 287–307, (1998).
 30. S. Carmona, C. Landim, A. Lopes, S. Lopes; A level 1 large deviations principle for the autocovariances of uniquely ergodic transformations with noise. *Journal of Statistical Physics* **91**, 395–421, (1998).
 31. G. Gielis, A. Koukkous, C. Landim; Equilibrium fluctuations for zero range processes in random environment. *Stochastic Processes and their Applications* **77**, 187–205, (1998).
 32. E. Janvresse, J. Quastel, C. Landim, H. T. Yau; Relaxation to equilibrium of conservative dynamics I : zero range processes. *The Annals of Probability* **27**, 325–360, (1999).
 33. C. Landim; Decay to equilibrium in L^∞ of asymmetric simple exclusion processes in infinite volume. *Markov Processes and Related Fields* **4**, 517–534, (1998).
 34. D. Gabrielli, G. Jona–Lasinio, C. Landim; Onsager symmetry from microscopic TP invariance, *Journal of Statistical Physics* **96**, 639–652, (1999).
 35. C. Landim, M. Mourragui, S. Sellami; Hydrodynamic limit of nongradient systems in contact with stochastic reservoirs, *Teoriya*

- Veroyatnostei i ee Primeneniya **45**, 694–717, (2000) and Theory of Probability and Its Applications. **45**, 604–623, (2001).
36. C. Landim, S. Volchan; Equilibrium fluctuation of a driven tracer particle dynamics, Stochastic Processes and their Applications **85**, 139–158, (2000).
 37. P. A. Ferrari, A. Galves, C. Landim; Convergence to equilibrium of the symmetric simple exclusion process. Markov Processes and their Applications **6**, 73–88, (2000).
 38. E. Andjel, P. A. Ferrari, H. Guiol, C. Landim; Convergence to the maximal invariant measure in zero range process with random rates. Stochastic Processes and their Applications **90**, 67–81, (2000).
 39. C. C. Chang, C. Landim, S. Olla; Equilibrium fluctuations of asymmetric exclusion processes in dimension $d \geq 3$. Probability Theory and Related Fields **119**, 381–409, (2001).
 40. C. Landim, S. Olla, S. R. S. Varadhan; Symmetric simple exclusion process: regularity of the self diffusion coefficient. Communications in Mathematical Physics **224**, 307–321, (2001).
 41. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Fluctuations in Stationary Nonequilibrium States. Physical Review Letters **87**, 040601, (2001).
 42. C. Landim, S. Olla, Varadhan S. R. S.; Asymptotic behavior of a tagged particle in simple exclusion processes. Boletim da Sociedade Brasileira de Matemática, **31**, 241–275, (2001).
 43. C. Landim, S. Olla, S. R. S. Varadhan; Finite-dimensional approximation of the self-diffusion coefficient for the exclusion process, The Annals of Probability **30**, 483–508, (2002).
 44. C. Landim, G. Panizo, H. T. Yau; Spectral gap and logarithmic Sobolev inequality for unbounded conservative spin systems. Annales de l’Institut Henri Poincaré, Prob. et Stat. **38**, 739–777, (2002).
 45. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Macroscopic fluctuation theory for stationary nonequilibrium states. Journal of Statistical Physics **107**, 635–675, (2002),
 46. C. Landim, H. T. Yau; Convergence to equilibrium of conservative particle systems on \mathbb{Z}^d . The Annals of Probability **31**, 115–147, (2003).

47. Landim C., Quastel J., Salmhofer M., Yau H. T., Supperdiffusive behavior of one dimensional asymmetric exclusion process. *Commun. Math. Phys.* **244**, 455-481, (2003)
48. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Large deviations for the boundary driven symmetric simple exclusion process. *Math. Phys. Anal. Geom.* **6**, 231-267, (2003).
49. Chang C. C., Landim C., Lee T. Y., Occupation time large deviations of two dimensional symmetric simple exclusion process. *Annals of Probability* **32**, 661-691, (2004).
50. C. Landim, S. Olla, S. R. S. Varadhan; On viscosity and fluctuation-dissipation in exclusion processes. *Journal of Statistical Physics* **115**, 323-363, (2004)
51. P. A. Ferrari, C Landim and H. Thorisson; Poisson trees, succession lines and coalescing random walks. *Annales de l'Institut Henri Poincaré, Prob. et Stat.* **40**, 141-152, (2004)
52. C. Landim, S. Olla, S. R. S. Varadhan; Diffusive behaviour of the equilibrium fluctuations in the asymmetric exclusion processes. *Advanced Studies in Pure Mathematics* **39**, 307-324, (2004).
53. C. Landim, R. M. Sued, G. Valle; Hydrodynamic limit of asymmetric exclusion processes under diffusive scaling in $d \geq 3$. *Commun. Math. Phys.* **249**, 215-247, (2004).
54. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Minimum dissipation principle in stationary non equilibrium states. *J. Stat. Phys.* **116**, 831-841 (2004).
55. C. Landim, J. Monteiro; Poincaré and Logarithmic Sobolev Inequality for Ginzburg-Landau Processes in Random Environment. *Probab. Th. Rel. Fields.* **131**, 229-260, (2005).
56. C. Landim; Gaussian estimates for symmetric simple exclusion processes. *Ann. Fac. Sciences Toulouse* **14**, 683-703 (2005).
57. C. Landim, J. A. Ramírez, H. T. Yau; Superdiffusivity of two dimensional lattice gas models. *J. Stat. Phys.* **119**, 963 - 995 (2005).
58. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Macroscopic current fluctuations in stochastic lattice gases. *Phys. Rev. Lett.* **94**, 030601, (2005).
59. B. Derrida, C. Enaud, C. Landim, S. Olla; Fluctuations in the weakly asymmetric exclusion process with open boundary conditions. *J. Stat. Phys.* **118**, 795 - 811 (2005).

60. M. Jara, C. Landim; Nonequilibrium central limit theorem for a tagged particle in symmetric simple exclusion. *Annales de l'Institut Henri Poincaré, Prob. et Stat.* **42**, 567 – 577 (2006).
61. C. Landim, G. Valle; A microscopic model for Stefan's melting and freezing problem. *Ann. Probab.* **34**, 779-803 (2006).
62. C. Landim; Interacting particle systems and hydrodynamic equations; *Encyclopedia of Mathematical Physics*, Kluwer, (2006).
63. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Non equilibrium current fluctuations in stochastic lattice gases. *J. Stat. Phys.* **123**, 237 – 276 (2006).
64. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Large deviation approach to non equilibrium processes in stochastic lattice gases. *Bol. Soc. Brasil. Mat. (N.S.)* **37**, 611 — 643 (2006).
65. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Large deviations of the empirical current in interacting particle systems. *Theory Probab. Appl.* **51**, 2–27 (2007).
66. P. A. Ferrari, C. Landim, V. V. Sisko; Condensation for a fixed number of independent random variables. *J. Stat. Phys.* **128**, 1153 – 1158 (2007).
67. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Stochastic interacting particle systems out of equilibrium. *J. Stat. Mech.* (2007) P07014 <http://www.iop.org/EJ/abstract/1742-5468/2007/07/P07014>
68. M. Jara, C. Landim; Quenched nonequilibrium central limit theorem for a tagged particle in the exclusion process with bond disorder. *Ann. Inst. H. Poincaré, Probab. Statist.* **44**, 341–361 (2008).
69. J. Beltrán, C. Landim; A lattice gas model for the incompressible Navier-Stokes equation. *Ann. Inst. H. Poincaré, Probab. Stat.* **44**, 886–914 (2008).
70. C. Landim, A. Milanes, S. Olla; Stationary and nonequilibrium fluctuations in boundary driven exclusion processes. *Markov Proces. Related Fields* **14**, 165–184 (2008).
71. M. Jara, C. Landim, S. Sethuraman; Nonequilibrium fluctuations for a tagged particle in mean-zero one-dimensional zero-range processes. *Probab. Th. Rel. Fields* **145**, 565–590 (2009).

72. A. Faggionato, M. Jara, C. Landim; Hydrodynamic behavior of one dimensional subdiffusive exclusion processes with random conductances. *Probab. Th. Rel. Fields* **144**, 633–667, (2009).
73. L. Bertini, D. Gabrielli, C. Landim; Strong asymmetric limit of the quasi-potential of the boundary driven weakly asymmetric exclusion process. *Commun. Math. Phys.* **289**, 311–334 (2009).
74. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Towards a nonequilibrium thermodynamics: a self-contained macroscopic description of driven diffusive systems. *J. Stat. Phys.* **135**, 857–872 (2009).
75. P. Gonçalves, C. Landim, C. Toninelli; Hydrodynamic Limit for a Particle System with degenerate rates. *Ann. Inst. H. Poincaré, Probab. Statist.* **45**, 887–909 (2009).
76. L. Bertini, C. Landim, M. Mourragui; Dynamical large deviations for the boundary driven weakly asymmetric exclusion process. *Ann. Probab.* **37**, 2357–2403 (2009).
77. T. Franco, C. Landim; Hydrodynamic limit of gradient exclusion processes with conductances. *Arch. Ration. Mech. Anal.* **195** 409–439 (2010).
78. J. Beltrán, C. Landim; Tunneling and metastability of continuous time Markov chains. *J. Stat. Phys.* **140** 1065–1114 (2010).
79. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Lagrangian phase transitions in nonequilibrium thermodynamic systems, *J. Stat. Mech. Theory Exp.* L11001 (2010).
80. C. Bernardin, C. Landim; Entropy of stationary nonequilibrium measures of boundary driven symmetric simple exclusion processes. *J. Stat. Phys.* **141**, 1014–1038 (2010).
81. M. Jara, C. Landim, A. Teixeira; Quenched scaling limits of trap models. *Ann. Probab.* **39**, 176–223 (2011).
82. J. Farfan, C. Landim, M. Mourragui; Hydrostatics and dynamical large deviations of boundary driven gradient symmetric exclusion processes. *Stochastic Process. Appl.* **121** 725–758 (2011).
83. L. Bertini, A. De Sole, D. Gabrielli, G. Jona-Lasinio, C. Landim; Action functional and quasi-potential for the Burgers equation in a bounded interval, *Commun. Pure Appl. Math.* **64** 649–696 (2011).

84. J. Beltrán, C. Landim; Metastability of reversible finite state Markov processes. *Stoch. Proc. Appl.* **121** 1633–1677 (2011).
85. J. Beltrán, C. Landim; Metastability of reversible condensed zero range processes on a finite set. *Probab. Th. Rel. Fields* **152** 781–807 (2012).
86. C. Landim, R. D. Portugal, B. F. Svaiter; A Markovian Growth Dynamics on Rooted Binary Trees Evolving According to the Gompertz Curve. *Journal of Statistical Physics* **148**, 565–578 (2012)
87. J. Beltrán, C. Landim; Tunneling and metastability of continuous time Markov chains II. *J. Stat. Phys.* **149**, 598–618 (2012).

88. L. Bertini, D. Gabrielli, G. Jona-Lasinio, C. Landim; Thermodynamic transformations of nonequilibrium states. *Journal of Statistical Physics* **149**, 773–802 (2012).
89. L. Bertini, D. Gabrielli, G. Jona-Lasinio, C. Landim; Clausius inequality and optimality of quasi static transformations for nonequilibrium stationary states. *Phys. Rev. Lett.* **110**, 020601 (2013).

90. M. Jara, C. Landim, S. Sethuraman; Nonequilibrium fluctuations for a tagged particle in one-dimensional sublinear rate zero-range processes. *Ann. Inst. H. Poincaré, Probab. Statist.* **49**, 611–637 (2013).
91. O. Benois, C. Landim, M. Mourragui; Hitting times of rare events in Markov chains. *Journal of Statistical Physics* **153**, 967–990 (2013).
92. A. Gaudillière, C. Landim; A Dirichlet principle for non reversible Markov chains and some recurrence theorems. *Probab. Theory Related Fields* **158**, 55–89 (2014)
93. C. Bernardin, A. P. Gonçalves, C. Landim; Entropy of non-equilibrium stationary measures of boundary driven TASEP. *J. Stat. Phys.* **154**, 378–420 (2014)
94. C. Landim; Metastability for a non-reversible dynamics: the evolution of the condensate in totally asymmetric zero range processes. *Commun. Math. Phys.* **330**, 1–32 (2014)
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