

Noé CUNEO

Personal data

Birth: 08 October 1987 — Lausanne, Switzerland
Address: Université Paris Diderot, UFR de Mathématiques, Bâtiment Sophie Germain, 8 place Aurélie Nemour, 75205 Paris CEDEX 13, France.
E-mail: cuneo [at] lpsm.paris
Homepage: <http://www.ncuneo.com>

Education and positions held

- 2018-... **Maître de conférences** (~ tenured assistant professor), Laboratoire de Probabilités, Statistique et Modélisation (LPSM), Université Paris Diderot (Paris 7), France.
- 2017-2018 **Postdoc**, Laboratoire AGM, Université de Cergy-Pontoise, France, with A. Shirikyan.
- 2016-2017 **Postdoc**, Department of Mathematics and Statistics, McGill University, Montreal, Canada, with V. Jakšić.
- 2012-2016 **Ph.D., Physics**, University of Geneva, Switzerland. Advisor: J.-P. Eckmann. Ph.D. thesis: *Non-equilibrium steady states for Hamiltonian chains and networks*. Thesis committee: J.-P. Eckmann (advisor), Y. Velenik (co-advisor), M. Hairer, A. Shirikyan.
- 2010-2012 **M.Sc., Physics**, EPFL (Ecole Polytechnique Fédérale de Lausanne), Switzerland. Master's thesis: *Intermittency: physics and mathematics. Ergodic properties of a class of 1D intermittent dynamical systems*. Advisor: C.-E. Pfister.
- 2007-2010 **B.Sc., Physics**, EPFL, Switzerland.

Publications and preprints

- 2018 N. Cuneo, J.-P. Eckmann, M. Hairer, and L. Rey-Bellet. Non-equilibrium steady states for networks of oscillators. *Electronic Journal of Probability*, 23: paper no. 55, 28pp, 2018
- 2017 N. Cuneo, V. Jakšić, C.-A. Pillet, and A. Shirikyan. Large deviations and fluctuation theorem for selectively decoupled measures on shift spaces. *arXiv:1712.09038*, 2017
- 2017 N. Cuneo, V. Jakšić, C.-A. Pillet, and A. Shirikyan. Fluctuation theorems and thermodynamic formalism. *arXiv:1712.05167*, 2017
- 2017 N. Cuneo, J.-P. Eckmann, and C. E. Wayne. Energy dissipation in Hamiltonian chains of rotators. *Nonlinearity*, 30(11):R81. Selected in “Nonlinearity Highlights of 2017”, 2017
- 2017 N. Cuneo and C. Poquet. On the relaxation rate of short chains of rotors interacting with Langevin thermostats. *Electronic Communications in Probability*, 22: paper no. 35, 8pp, 2017
- 2016 N. Cuneo and J.-P. Eckmann. Non-equilibrium steady states for chains of four rotors. *Communications in Mathematical Physics*, 345(1):185–221, 2016
- 2015 N. Cuneo, J.-P. Eckmann, and C. Poquet. Non-equilibrium steady state and subgeometric ergodicity for a chain of three coupled rotors. *Nonlinearity*, 28(7):2397–2421, 2015
- 2014 N. Cuneo and J.-P. Eckmann. Controlling general polynomial networks. *Communications in Mathematical Physics*, 328(3):1255–1274, 2014

Teaching experience

- 2018 *Elementary Analysis and Algebra 1* (lectures and exercise sessions), Université Paris-Diderot.
- 2017 *Ergodic theory with applications to number theory and intermittency* (summer lectures), McGill University.
- 2017 Advisor for summer projects (undergraduate students in mathematics), McGill University.
- 2014-2016 T.A. for *Introduction to Perturbative Methods*, University of Geneva.
- 2014 Advisor for a Master's student's half-semester project, University of Geneva.
- 2013-2016 T.A. for *Mechanics II*, University of Geneva.
- 2012-2013 T.A. for *Mathematical Methods for Physicists I*, University of Geneva.
- 2010-2012 T.A. for *Analysis I-II for Physicists and Mathematicians*, EPFL.
- 2009 T.A. for *Laboratory Work in Physics*, Medical School, University of Lausanne.

Awards and scholarships

- 2017 **ISITE Postdoctoral fellowship** (24 months) at Université de Cergy-Pontoise, France.
- 2015 **Early Postoc.Mobility fellowship** (Swiss National Science Foundation) for an 18-month postdoc at McGill University, Montreal, Canada and at Université de Cergy-Pontoise, France.
- 2012 **EPFL Prize** for the best Master's degree results across EPFL (6.00/6.00).
- 2010 **EPFL Prize** for the best Bachelor's degree results across EPFL (5.90/6.00).
- 2010 **EPFL Excellence Scholarship** for the Master's cycle.
- 2009 **Tschumy Prize** for the best first-year results across EPFL (5.93/6.00).

Talks

- Feb. 2019 (Upcoming) Université de Bordeaux, conférence du GDR *Dynamique quantique*.
- Jan. 2019 (Upcoming) LPSM, Sorbonne Université, Paris, *Séminaire de Probabilités*.
- Dec. 2018 (Upcoming) Université Paris-Dauphine, *Séminaire du CEREMADE Analyse-Probabilités*.
- Nov. 2018 Duke University, Durham, *Applied Math And Analysis Seminar*.
- Nov. 2018 CRM, Université de Montréal, *Entropic Fluctuation Relations in Mathematics and Physics* workshop.
- July 2018 International Congress of Mathematical Physics (ICMP) 2018, Montreal, contributed talk.
- June 2018 Université Paris Diderot, *Stochastic Problems in Mathematical Physics and Economics*
- Mar. 2018 Centre de Physique Théorique, Marseille, *Séminaire Systèmes dynamiques quantiques et classiques*.
- Mar. 2018 Département de Mathématiques d'Orsay, Université Paris-Sud, *Séminaire de Probabilités et Statistique*.
- Mar. 2018 LPSM, Sorbonne Université, Paris, *Séminaire de Théorie Ergodique*.
- Mar. 2018 Institut de mathématiques, Université de Neuchâtel, *Rencontres de mathématiques*.
- Feb. 2018 Laboratoire J.A. Dieudonné, Université de Nice Sophia Antipolis, *Séminaire de Probabilités et Statistiques*.
- Feb. 2018 LPSM, Université Paris Diderot, *"Modélisation" Workshop*.
- Jan. 2018 Université de Cergy-Pontoise, *Séminaire Géométrie, EDP et Physique Mathématique*.
- Oct. 2017 Université Paris Diderot, *Journées de dynamique*.
- Jul. 2017 McGill University, Montreal, *Working Seminar in Mathematical Physics*.
- June 2017 University of British Columbia, Vancouver, PIMS-CRM Summer School in Probability.
- Apr. 2017 University of Massachusetts Amherst, Department of Mathematics & Statistics.
- Apr. 2017 Boston University, Department of Mathematics & Statistics, *Dynamical Systems Seminar*.

- Dec. 2016 University of Geneva, Theoretical Physics Department, *Mathematical Physics Seminar*.
Sep. 2016 McGill University, Montreal, *Working Seminar in Mathematical Physics*.
June 2016 Institut Henri Poincaré, Paris, *Stochastic Problems in Mathematical Physics and Economics Seminar*.
Oct. 2015 University of Geneva, Section of Mathematics, *Mathematical Physics Seminar*.
Oct. 2015 Université Claude Bernard Lyon 1, *Séminaire de probabilité*.
July 2015 Pontificia Universidad Católica de Chile, *Young Researchers Symposium*.
Mar. 2015 Université de Cergy-Pontoise, *Non-equilibrium Statistical Mechanics of Stochastic Systems* Conference. 4-hour minicourse: *Non-equilibrium steady states for classical chains of rotors/oscillators*.
Oct. 2014 ETH Zurich, *Mathematical Physics and Quantum Mechanics* Workshop.

Languages

- FRENCH: Mother tongue
ENGLISH: Fluent (spoken and written)
GERMAN: Basic knowledge (spoken and written)

Non-academic professional experience

- 2008 - 2011 Design and implementation of automated importation and deduplication algorithms for bibliographic citations, *Infoscience* services, EPFL.
2005 - 2007 Publication of articles in the Swiss general-public newspaper *Le Temps*.
2001 - 2017 Development, maintenance, and publication of technical articles on the website www.cuk.ch.
2001 - 2012 Web development for several Swiss companies and non-profit organizations.