Cyril Labbé

Date of birth : 20 November 1987, Citizenship : French

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Current and former positions

2015 - present	**Maître de Conférences** CEREMADE, University Paris-Dauphine
2013 - 2015	**Research fellow** Mathematics Institute, University of Warwick under the supervision of Martin Hairer.
2010 - 2013	**PhD student** LPMA, Univ. Pierre et Marie Curie - Paris 6 Title of the thesis: Flots stochastiques et représentation lookdown. Supervisors: J. Berestycki and A. Lambert. Reviewed by: D. Dawson and J.F. Le Gall. Examiners: J. Bertoin, T. Duquesne, A. Etheridge, J.F. Le Gall.

Education

2009 - 2010	**Master 2** Probability theory, Univ. Paris 11 - Orsay Master thesis: Coalescence and random trees, supervised by G. Miermont.
2006 - 2010	**Ecole Centrale Paris** Major: Applied mathematics.
2004 - 2006	**Classes préparatoires** Lycée Henri IV, Paris MPSI/MP*
2004	**Baccalauréat** Lycée Jules Ferry, Paris

Publications and preprints

1. *From flows of Λ-Fleming-Viot processes to lookdown processes via flows of partitions*,
   Electronic Journal of Probability, 2014 vol.19, no 55 pp 1-49.

2. *Genealogy of flows of continuous-state branching processes via flows of partitions and the Eve property*,
   Annales de l'Institut Henri Poincaré, 2014 vol.50, no 3 pp 732-769.

3. *Quasi-stationary distributions associated with explosive CSBP*,
   Electronic Communications in Probability, 2013 vol. 18, no 57 pp 1-13.

4. *On the Eve property for CSBP*, (with Thomas Duquesne),
   Electronic Journal of Probability, 2014 vol. 19, no 6 pp 1-31.

5. *Scaling limits of weakly asymmetric interfaces*, (with Alison M. Etheridge),
   Communications in Mathematical Physics, 2015 vol. 336, issue 1, pp 287-336.

6. *A simple construction of the continuum parabolic Anderson model on $\mathbf{R}^2$*, (with Martin Hairer),
   Electronic Communications in Probability, 2015 vol. 20, no 43 pp 1-11.

7. *Multiplicative stochastic heat equations on the whole space*, (avec Martin Hairer),
   Journal of the European Mathematical Society, 2018 vol. 20, issue 4, pp
   1005-1054..

8. *Weakly asymmetric bridges and the KPZ equation*,
   Communications in Mathematical Physics, 2017 vol. 353, no 3, pp 1261-1298.

9. *The reconstruction theorem in Besov spaces*,
   Journal of Functional Analysis, 2017 vol. 273, issue 8, pp 2578-2618.

10. *On the scaling limits of weakly asymmetric bridges*,
    Probability Surveys, 2018 vol. 15, pp 156-242.

11. *Cutoff phenomenon for the asymmetric simple exclusion process and the biased
    card shuffling*, (avec Hubert Lacoin)
    arXiv e-print 1610:07383, accepted for publication in Annals of Probability.

12. *Localization of the continuous Anderson Hamiltonian in 1-d*, (avec Laure Dumaz)
    arXiv e-print 1711.04700.

13. *Existence of densities for the dynamic Φ_3^4 model*, (avec Paul Gassiat)
    arXiv e-print 1711.08332.

14. *Mixing time and cutoff for the weakly asymmetric simple exclusion process*, (avec
    Hubert Lacoin)
    arXiv e-print 1805.12213.

15. *The continuous Anderson hamiltonian in $d \leq 3$*,
    arXiv e-print 1809.03718.

Research interests

- Stochastic analysis, stochastic PDEs, regularity structures.

- Anderson localisation, Schrödinger operators, random matrices.

- Scaling limits of particle systems, Mixing times of Markov chains.

- Branching processes, coalescent processes, measure-valued processes.

Teaching

2015-present	**Lecturer** at the University Paris-Dauphine Courses and classwork sessions on probability theory for master students.
2014-2015	**Tutor** at the University of Warwick (approx. 8h.) Lectures on stochastic PDEs for PhD students.
2013-2014	**Tutor** at the University of Warwick (approx. 10h.) Classwork sessions in the Probability course for PhD students.
2010-2013	**Tutor** at the Université Paris 6 (approx. 192h.) Linear algebra (L1), Series and integrals (L2), Measure theory and integration (L3).

- 2018: Séminaire de Proba (Orsay), Groupe de travail Matrices Aléatoires (IHP), Proba seminar (TU Berlin), Séminaire Proba (ENSTA), Proba seminar (IMPA, Rio), Journées MAS (Dijon).

- 2017: Séminaire méca stat (Paris 7), Séminaire de proba (Angers), SPDE conference (Warwick), Séminaire de proba (Nanterre), Probability seminar (Columbia/Courant), Séminaire de proba (Marseille), Interacting systems and SPDEs (Sheffield), Séminaire de proba (Paris 13), Meeting of the German and Austrian Math Soc. (Salzbourg), Séminaire d'analyse et probabilités (Cermics), Probas du vendredi (Paris 6), Séminaire de proba (ENS Lyon), Séminaire de math. appli. (Collège de France).

- 2016: Frontiers in probability and analysis (Strasbourg), Workshop on probabilistic models (Warwick), Workshop on SPDEs (Oberwolfach), Séminaire de Proba (Paris 7), Workshop on random trees and maps (Luminy), Workshop on SDEs (Mannheim), Paris-Bath meeting (Paris), Conf on Dynamical systems, diff eq and appl (Orlando), Statistical Mechanics seminar (Warwick), Probability seminar (Zurich).

- 2015: Rough Paths meeting (Berlin), Stochastic analysis colloquium (Nice), Probability seminar (Cambridge), Probability seminar (Dauphine), East Midlands Stochastic Analysis Seminar (York), School on renormalisation group theory (Warwick), Probability seminar (Lyon), SPDEs workshop (Paris), British Mathematical Colloquium (Cambridge), Rough Paths meeting (Berlin).

- 2014: Probability seminar (Bath), Probability seminar (Rennes), Stochastic analysis seminar (Oxford), Singular SPDEs summer school (Pisa), Saint-Flour summer school, Rough Paths meeting (Oxford), Statistical Mechanics Seminar (Warwick), GTX seminar (Ecole Polytechnique).

- 2013: Rough Paths meeting (Berlin), Probability seminar (Oxford), Random trees workshop (Montreal), Probability seminar (Nancy), Stochastic analysis seminar (Warwick).

- 2012: Random trees and applications workshop (Luminy), Saint-Flour summer school, Informal Workshop (Oxford).

- 2011: Paris-Bath branching structures meeting (Paris), Population Genetics workshop (Agay).

- "Délégation CNRS" over the year 2018-2019.

- Reviewer for *Probability Theory and Related Fields*, *Annales de l'IHP*, *Journal of Functional Analysis*, *Electronic Communications in Probability*, *Electronic Journal of Probability*, *Stochastic Processes and their Applications*, *Stochastic PDEs: Analysis and Computations*.

- Scientific sojourn at the Department of statistics in Oxford from January to June 2012. Supervised by Alison Etheridge. Partially funded by the Fondation Sciences Mathématiques de Paris.

- English: fluent; Spanish: solid notions; Russian: to be brushed up.

- Regular practice of football and swimming.