

Guillaume Conchon- -Kerjan

Curriculum Vitae

University of Bath, Claverton Down
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Professional Experience

Working

2021-2023 **Research Associate (Postdoc)**, *Prob-L@B, University of Bath*, Advisor: Daniel Kious

2017-2021 **PhD**, *Laboratoire de Probabilités, Statistiques et Modélisation (LPSM), Université Paris Diderot*, Supervisor: Justin Salez

Internships and dissertations

June 2021 **PhD Thesis**, *Sparse random graphs: from local specifications to global properties*, Supervised by Justin Salez

March 2016 - **Internship at Oxford's Statistics Department**, *Scaling limits of a critical random graph with i.i.d. power-law degrees*, Supervised by Christina Goldschmidt

June 2016
2016 **Master's Thesis**, *An SDE for a path-valued Markov process*, Supervised by Vincent Bansaye and Sylvie Méléard

2014 **Bachelor's Thesis**, *Classification of compact surfaces in dimension 2*, joint with Guillaume Maillard, supervised by Antoine Touzé

Teaching

2017-2021 **Teaching assistant**, *Université Paris Diderot, Paris, France*

2014-2016 **Colleur in CPGE** (\sim oral examiner at undergraduate level), *Lycée Louis-le-Grand, Paris, France*

2013-2015 **Colleur in CPGE**, *Lycée Condorcet, Paris, France*

Organizing

June 2023 **Co-organizer of the workshop "Random Walks in Bath"**, with Daniel Kious and Augusto Teixeira, *University of Bath*

2022- **Co-organizer of the Probability Internal Monthly Seminar**, *Prob-L@B, University of Bath*

2021- **Organizer of a reading group on percolation**, *Prob-L@B, University of Bath*

2018-2019 **Co-organizer of the PhD Students' Probability Seminar**, *LPSM, Université de Paris*

Education

2015-2016 **Master 2 (MS) in Probabilities**, *Université Pierre et Marie Curie, Paris*

2013-2014 **Licence (BS) in Mathematics**, *École Normale Supérieure de Paris*

2013 **Admission to École Normale Supérieure de Paris**

2011-2013 **CPGE in MP (Mathematics and Physics)**, *Lycée Louis-le-Grand, Paris, France*

2011 **Scientific Baccalauréat & Abitur (French and German high school diplomas)**, *Lycée International, Saint-Germain-en-Laye*

Publications and preprints

- Publications Conchon–Kerjan G. *Cutoff for random lifts of weighted graphs*, *The Annals of Probability*, Jan. 2022, pp. 304-338. DOI: 10.1214/21-AOP1534
- 2020 Conchon–Kerjan G. & Goldschmidt C. *The stable graph: the metric space scaling limit of a critical random graph with i.i.d. power-law degrees* *The Annals of Probability* (to appear), available at <https://arxiv.org/abs/2002.04954>
- Preprints 2021 Conchon–Kerjan G. *Anatomy of a gaussian giant: supercritical level-sets of the free field on random regular graphs* (submitted), available at <https://arxiv.org/abs/2102.10975>

Talks at seminars and conferences

- June 2022 **Stochastic Processes and Applications, Wuhan**, Invited session *Mixing Times of Markov Chains*
"Entropic cutoff for the random walk on random lifts of Markov chains"
- June 2022 **Probability Seminar, University of Oxford**
"Scaling limits of a branching process in varying environment"
- June 2022 **Probability Seminar, Universität zu Köln**
"Scaling limits of a critical Galton-Watson tree in random environment"
- May 2021 **Seminar in Probability Theory and Statistics, University of Basel**
"Level-set percolation of the GFF on regular graphs: emergence of a Gaussian giant"
- July 2019 **Random Trees and Graphs Summer School, CIRM, Marseille**
"Cutoff for the random walk on random lifts"
- June 2019 **Les Probabilités de Demain, Université Paris-Diderot, Paris**
"Cutoff for the random walk on lifts of graphs"
- July 2018 **Saint-Flour Probability Summer School**
"Metric scaling limit for a critical configuration model with power-law degrees"
- May 2018 **Franco-Dutch YEP Workshop, TU Eindhoven, Netherlands**
"Metric scaling limit for a critical configuration model with power-law degrees"

Upcoming talks

- June 2022 **42nd Conference on Stochastic Processes and Applications, Wuhan, China**
"Entropic cutoff for the random walk on random lifts of Markov chains"

Other conferences

- November 2021 **Workshop The Cutoff Phenomenon for Finite Markov Chains, Oberwolfach**
- January 2018 **Young Probabilists and Statisticians, IHP, Paris**
- July 2017 **Spectral properties of large random objects, IHES, France**
- March 2017 **Journées ALEA, CIRM, Marseille**
- July 2016 **Saint-Flour Probability Summer School**
- June 2015 **PIMS Summer School, University McGill, Montréal**

Reviewing Work

Annals of Applied Probability
Electronic Journal of Probability

Other Mathematics

- 2013-2021 **Teacher and Staff Member in the French training program for the International Mathematical Olympiad**, <http://maths-olympiques.fr/>, teaching, organization of training camps, team leader in competitions
- 2019-2020 **Member of Animath's Board**, <https://animath.fr/>, an association promoting math towards the youth and the general public
 - 2018 **Teacher in Tech Scouts Summer School**, <https://techscouts.harbour.space/>, International summer camp for high school students, held in Barcelona
math classes oriented towards olympiads
- 2012,2014 **Team leader at ITYM**, <http://www.itym.org/Home>, an international team competition initiating highschool students to research
- 2015-2018 **Jury and Problem selection committee member at TFJM²**, <https://tfjm.org/>, a French team competition initiating highschool students to research
- 2017,2018 **Participation to the Fête de la Science**, scientific activities in primary schools
- 2015-2016 **Organizer of Parimaths**, <http://www.parimaths.fr/>, a math club for highschool students, oriented towards olympiads and general math culture
 - 2012 **Participant at ISSMYS**, <http://www.issmys.eu/>, International Summer School of Mathematics for Young Students, held in Lyon
oriented towards research

Languages

French Mother Tongue
German Fluent
English Fluent
Italian Intermediate
Chinese Basic