Grégory MIERMONT
Professeur (PRCE)
École Normale Supérieure de Lyon
Unité de Mathématiques Pures et Appliquées
46 allée d'Italie 69364 Lyon Cedex 07
Tel. : +33 (0)4 72 72 84 21
gregory.miermont@ens-lyon.fr
perso.ens-lyon.fr/gregory.miermont

Born 16 July 1979 in Paris
French citizen
Married, two children

Academic Vita

2008	**Habilitation à Diriger des Recherches:** *Random trees, maps, fragmentation and coalescence processes*, Université Paris-Sud 11, defended 28-11-2008.
2000-2003	**PhD in Mathematics:** *Stochastic coalescence and fragmentation, random trees and Lévy processes,* Université Pierre et Marie Curie, under the supervision of Jean Bertoin, defended 16-12-2003
2001-2002	**Visiting Student** at the Department of Statistics, University of California, Berkeley, under the supervision of David Aldous and Jim Pitman
1998-2002	**Student at the École Normale Supérieure,** Paris

Positions held

2012–	**Professor** at École Normale Supérieure de Lyon, Unité de Mathématiques Pures et Appliquées.
2009–2012	**Professor** at Université Paris-Sud 11, Laboratoire de Mathématiques d'Orsay (on leave in 2011–2012, visiting University of British Columbia, Vancouver).
2004–2009	**CNRS Researcher,** Département de Mathématiques, Université de Paris-Sud and DMA, École Normale Supérieure

Current duties

- President of the Scientific Council of Fondation des Sciences Mathématiques de Paris

- Associate Editor, *Random Structures and Algorithms*.

Past editorial duties

- 2016-2021 Chief Editor, *Annales de l'Institut Henri Poincaré (B)* (with C. Sabot)

- 2012–2016 Chief Editor, *Cours Spécialisés*, Société Mathématique de France (Associate Editor 2006–2012)

- 2010–2016 Associate Editor, *Probability Theory and Related Fields*

Conference organization (selection)

- Co-organizer of the thematic term at the Centre Émile Borel (Institut Henri Poincaré, Paris) *Physique statistique, combinatoire et probabilités: approches du continu par le discret*, Fall 2009. http://ipht.cea.fr/statcomb2009/

- Co-organizer of the CIRM workshop *Arbres et cartes aléatoires: aspects probabilistes et combinatoires*, June 6–10 2016.

- Co-organizer of the ProbabLyon thematic terms, MILYON, April 3 – June 9, 2017.

- Co-organizer of the MFO meeting *Stochastic Analysis: Geometry of random processes*, May 28 – June 3rd, 2017

- Co-organizer of the *ALEA days* conference, March 21–25, at CIRM.

- Co-organizer of the MFO meeting *Universality: Random Matrices, Random Geometry and SPDEs*, May 29 – June 4th, 2022

- Co-organizer of the mini-school on *Universality in mathematical physics: random geometries, field theories and hydrodynamics*, MILYON, September 26–30, 2022.

Selected invited conferences and lectures

- The 3rd Haifa Probability School, *Workshop on Random Geometry and Stochastic Analysis*. February 24–28, 2020.

- 12th MSJ-SI conference on *Stochastic Analysis, Random Fields and Integrable Probability*, Fukuoka, July 31 – August 9, 2019.

- *Seminar on stochastic processes*, Brown University, Providence, USA. May 9–12, 2018

- Nachdiplom Lecturer, ETH Zurich, Autumn 2016.

- IMS Medallion lecture, *39th Congress on Stochastic Processes and Applications*, Oxford, July 2015.

- Rothschild invited Professor, Isaac Newton Institute program on *Random geometry*, January 2015.

- *Saint-Flour Summer School*, July 2014

- *Barrett lectures*, University of Tennessee, Knoxville, June 2014.

- *Emerging Trends in Probability Theory*, Max Planck Institute, Leipzig, Germany, 2013.

- Invited lecturer for the *PIMS-Mprime Summer School in Probability*, UBC, Vancouver, 2012

- *10th Northeast Probability Seminar*, CUNY, New York, 2011

- *Stochastics Meeting Lunteren*, the Netherlands, 2010.

- Plenary conference, *34th Congress on Stochastic Processes and Applications*, Osaka, Japan, 2010.

- Invited lecturer for the *Clay Mathematical Institute Summer School, Probability and Statistical Physics in Two and more Dimensions*, Buzios, Brazil. Joint set of lectures with J.-F. Le Gall, 2010

- *Fractal Geometry and Stochastics 4*, Greifswald, Germany, 2008

PhD Students

- Jérémie Bettinelli, *Scaling Limits of Arbitrary Genus Random Maps*, defended 26/10/2011.

- Robin Stephenson (co-advisor B. Haas), *Various aspects of random trees: from fragmentation trees to infinite planar maps*, defended 27/06/2014.

- Daphné Dieuleveut (co-advisor Y. Le Jan), *Cutting and rebuilding random trees and maps*, defended 10/12/2015.

- Loïc Richier, *Géométrie et percolation sur des cartes à bord aléatoires*, defended 30/06/2017.

- Ariane Carrance (co-advisor F. Vignes-Tourneret), *Triangulations colorées aléatoires*, defended 20/09/2019

- Mickael Maazoun, *Permutons limites universels de permutations aléatoires à motifs exclus*, defended 23/11/2020

- Léo Dort (co-advisor E. Jacob), *Limite locale de graphes aléatoires dynamiques et Principes de grandes déviations pour les processus de Lévy α-stables sans saut négatif*, defence expected 09/2023.

- William Fleurat (current), PhD started 09/2021.

- Thomas Buc-D'Alché (co-advisor A. Guionnet), PhD started 09/2022.

- Mathieu Mourichoux, PhD starting 09/2023.

Post-docs mentored

- Erich Baur (2014-2017)

- Sanjay Ramassamy (2016-2017)

- Benedikt Stufler (2016-2017)

- Joonas Turunen (2020-2022)

Scientific collaborators

Louigi Addario-Berry, David Aldous, Omer Angel, Erich Baur, Olivier Bernardi, Jérémie Bettinelli, Julien Berestycki, Jean Bertoin, Jérémie Bouttier, Nicolas Broutin, Xinxin Chen, Nicolas Curien, Emmanuel Guitter, Bénédicte Haas, Jean-François Le Gall, Christina Goldschmidt, Markus Heydenreich, Remco van der Hofstad, Tim Hulshof, Emmanuel Jacob, Brett Kolesnik, Jean-François Marckert, Laurent Ménard, Jim Pitman, Gourab Ray, Loïc Richier, Jason Schweinsberg, Sanchayan Sen, Mathilde Weill, Matthias Winkel.

10 selected publications

- D. Aldous, G. Miermont, and J. Pitman, The exploration process of inhomogeneous continuum random trees, and an extension of Jeulin's local time identity, *Probab. Theory Related Fields*, **129** (2004), pp. 182– 218.

- J.-F. Marckert and G. Miermont, Invariance principles for random bipartite planar maps, *Ann. Probab.* **35**, n.5, 1642–1705 (2007)

- G. Miermont, Tessellations of random maps of arbitrary genus, *Ann. Scient. Éc. Norm. Supér.* **42**, fascicule 5, 725–781 (2009).

- J.-F. Le Gall and G. Miermont, Scaling limits of random planar maps with large faces. *Ann. Probab.* **39**, n.1, 1–69 (2011).

- B. Haas and G. Miermont, Scaling limits of Markov branching trees, with applications to Galton-Watson and random unordered trees. *Ann. Probab* **40**(6), 2589–2666 (2012).

- G. Miermont, The Brownian map is the scaling limit of uniform random plane quadrangulations. *Acta Math.* **210**, 319–401 (2013)

- J. Bettinelli and G. Miermont, Compact Brownian surfaces I. Brownian disks. *Probability Theory and Related Fields* **167** (3), 555–614 (2017)

- L. Addario-Berry, N. Broutin, C. Goldschmidt and G. Miermont. The scaling limit of the minimum spanning tree of the complete graph. *Ann. Probab.*, 45, n.5, 3075–3144 (2017).

- E. Baur, G. Miermont and G. Ray, Classification of scaling limits of uniform quadrangulations with a boundary. *Ann. Probab.* 47, no.6, 3397–3477 (2019).

- J. Bouttier, E. Guitter and G. Miermont, Bijective enumeration of planar bipartite maps with three tight boundaries, or how to slice pairs of pants. *Ann. H. Lebesgue*, to appear (2022).

Awards

- 2007 prize of the Fondation des Sciences Mathématiques de Paris

- Rollo Davidson prize 2009

- 2012 Prize of the European Mathematical Society

- Junior Member of Institut universitaire de France 2013–2018

- Dœblin Prize 2014 of the Bernoulli Society/Springer

- 2015 Scientific Grant of the Fondation Simone et Cino Del Duca

- Prix Jaffé 2016 de l'Académie des Sciences

- Médaille d'argent du CNRS 2018