

Pascal Maillard

Professor
Institut de Mathématiques de Toulouse

born: Dec 17, 1985 in Müllheim (Germany)
citizenship: German, French
e-mail: [pascal.maillard\(at\)math.univ-toulouse.fr](mailto:pascal.maillard(at)math.univ-toulouse.fr)
web: www.math.univ-toulouse.fr/~pmaillar/

Postal address
Institut de Mathématique de Toulouse
Université Toulouse III - Paul Sabatier
118 route de Narbonne
31062 TOULOUSE Cedex 9
FRANCE

Academic position

Since 2019 **Full Professor**, Institut de Mathématiques de Toulouse, France

Feb-Dec 2018	Simons Research Fellow , Centre de Recherches Mathématiques (CRM), Université de Montréal, Canada
2014-19	Assistant/Associate Professor (Maître de Conférences) , Institut de Mathématique d'Orsay, Université Paris-Sud, France
2012-14	Post-doctoral fellow, Department of Mathematics, Weizmann Institute of Science, Israel
2009-12	PhD student, Université Pierre et Marie Curie, Paris.
2007	Research Assistant, Univ. Karlsruhe (TH), Institut for Theoretical Informatics (3 months)

Degrees and Education

2018	Habilitation , Université Paris-Sud, France. Thesis title: <i>Branching random walks et al.</i>
2012	PhD in Mathematics , Université Pierre et Marie Curie, Paris. Thesis title: <i>Branching Brownian motion with selection</i> . Supervisor: Zhan Shi.
2008-09	MSc in Mathematics, Université Pierre et Marie Curie, Paris
2007-08	Exchange student in Mathematics and Computer Science, Univ. Ljubljana, Slovenia
2004-07	Studies of Computer Science and Mathematics at Universität Karlsruhe (TH), Germany.
2004	German A levels (<i>Abitur</i>)

Distinctions and grants

2021-26	Member of Institut Universitaire de France (IUF)
2021-24	Project grant ANR-DFG REMECO (with Lisa Hartung, Mainz)
2018	Simons Research Fellowship, Simons Foundation

Academic service and community outreach

Research management

- Creation and co-organisation of French research network on branching structures (GdR Branchement), funded by CNRS, 170+ members, since 2023 (ongoing)

- Co-organisation of workshops/conferences:
 - Non-local branching processes, CIRM (Sep 23-27, 2024)
 - 1st conference of GdR Branchement, Toulouse (Nov 6-10, 2023)
 - Branching systems, reaction-diffusion equations and population models, Montreal (May 2-13, 2022)
 - Sixth Bath-Beijing-Paris conference on branching structures (online, Sep 13-15, 2021)
 - Conception, creation and organization (2016-19) of the yearly conference “Les probabilités de demain” (www.lesprobabilitesdedemain.fr). This conference gives PhD students in probability from the Paris area the opportunity to present their work to senior researchers.

Expertise activities

- Associate editor of “Annales de la Faculté des Sciences de Toulouse”, since 2022
- roughly 50 reviews of articles for various international journals
- reviews of proposals for NSF, ISF, BIRS
- member of two hiring committees, expertise for several promotion committees
- jury member of five PhD defenses

Expertise activities

- roughly 50 review of articles for various international journals
- reviews of proposals for NSF, ISF, BIRS
- member of two hiring committees, expertise for several promotion committees
- jury member of five PhD defenses

Long-term visits

April-July 2022	Probability and PDE thematic semester, CRM, Montreal
Jan-Dec 2018	Simons Research Fellow, CRM, Montreal

Participation at conferences and summer schools

Date	Name	Invited	Talk
Oct 16-20, 2023	Discrete Random Structures, Bedlewo	Yes	Yes
June 27-Jul 1, 2023	INFORMS Applied Probability Society conference, Nancy	Yes	Yes
May 22-26, 2023	Branching Processes and Applications, Angers	Yes	Yes
April 7-14, 2023	Probability and Combinatorics: 17 th annual workshop, Bellairs Research Institute, Barbados	Yes	No
Mar 6-10, 2023	Keynote Speaker , German Probability and Statistics Days, Essen	Yes	Yes
Feb 27-Mar 2, 2023	Branching and interacting particle systems, Mainz	Yes	Yes
May 2-13, 2022	Branching systems, reaction-diffusion equations and population models, Montreal (co-organisor)	No	No
Mar 25-Apr 1 st , 2022	Probability and Combinatorics: 16 th annual workshop, Bellairs Research Institute, Barbados	Yes	Yes
Sep 13-15, 2021	Sixth Bath-Beijing-Paris conference on branching structures (online, co-organisor)	No	No

Dec 14-18, 2019	Winter School on Random Graphs and Complex Networks, Pune, India (mini-course)	Yes	Yes
Sep 23-27, 2019	Branching in Innsbruck, Innsbruck	Yes	Yes
Jul 6-19, 2019	Saint-Flour Probability Summer School, Saint-Flour	No	Yes
Sep 6-7, 2018	Plenary Speaker , 9th International Conference on Stochastic Analysis and Its Applications, Bielefeld	Yes	Yes
Sep 3-5, 2018	Workshop on branching-type structures, Universität Zürich	Yes	Yes
Aug 27-31, 2018	Banff workshop “Interacting Particle Systems and Parabolic PDEs”	Yes	Yes
July 16-27, 2018	CIMPA School “Geometry and scaling of random structures”, Buenos Aires (cancelled participation)	Yes	Yes
July 9-20, 2018	Montréal summer workshop: challenges in probability and mathematical physics, Montreal	Yes	No
May 14-18, 2018	Paris-Bath-Beijing branching structures V, Beijing	Yes	Yes
Jul 13-14, 2017	Workshop “Phase transitions on random trees”, Dortmund	Yes	Yes
Jun 6-9, 2017	Conference “Statistical mechanics, random planar geometry and interacting random walks”, Lyon	Yes	No
May 29 – Jun 2, 2017	Oberwolfach workshop “Stochastic Analysis: Geometry of Random Processes”	Yes	No
Jul 7-8, 2016	Journées ANR GRAAL, Nancy	Yes	Yes
Sep 12-23, 2016	Summer School “Quantum integrable systems, conformal field theories and stochastic processes”, Cargèse	Yes	Yes
Jun 27-29, 2016	4th Paris-Bath branching structures meeting, IHP, Paris	Yes	Yes
Jun 6-10, 2016	Workshop “Random trees and maps”, CIRM, Luminy	Yes	No
Mar 29-30, 2016	ANR LIOUVILLE meeting, Lyon	Yes	Yes
Mar 9-11, 2016	Workshop “Stochastic PDE's, Large Scale Interacting Systems and Applications to Biology”, Université Paris-Sud	Yes	Yes
Jul 13-17, 2015	Invited Speaker at “Stochastic Processes and their Applications” (SPA), Oxford	Yes	Yes
Jun 1-2, 2015	Journées ANR GRAAL, Bordeaux	Yes	No
Feb 9-13, 2015	“Topics in low dimensional statistical mechanics“, Les Diablerets	Yes	Yes
Jun 16-20, 2014	“Analysis of Algorithms 2014”, UPMC, Paris	No	Yes
Mar 17-21, 2014	“Thematic school on mathematical biology, particle systems and reaction-diffusion”, Université de Toulouse	Yes	No
Jun 10-14, 2013	“Branching diffusions and Gaussian free fields in physics, probability and number theory”, Workshop, CIRM, Luminy	Yes	Yes
May 2, 2013	Students Probability Day IV, Weizmann Institute of Science	Yes	Yes
Apr 21-27, 2013	Oberwolfach workshop “Extremes in Branching Random Walk and Branching Brownian Motion”	Yes	Yes
Mar 5-8, 2013	“Genetic models and Quasi-stationarity”, Workshop, CIRM, Luminy	Yes	Yes
Jul 8-21, 2012	Ecole d'été de St Flour en Probabilités	No	Yes
Jun 18-29, 2012	“St Petersburg Summer School in Probability and Statistical	Yes	Yes

Physics”

Jun 11-15, 2012	Conférence ANR MEMEMO 2, Agay	Yes	Yes
Apr 16-20, 2012	Colloque des Jeunes Probabilistes et Statisticiens, CIRM, Luminy	No	Yes
Sep 27 – Oct 7, 2011	BMS Summer School, Berlin	No	Yes
Sep 15-16, 2011	Bath-Paris meeting on branching structures, Paris	Yes	No
Jun 20-24, 2011	Stochastic Processes and their Applications (SPA), Oaxaca	No	No
Mar 14-18, 2011	Young European Probabilists Meeting, EURANDOM, Eindhoven	No	No
Sep 14-15, 2010	Paris-Bath meeting on branching structures, Bath	Yes	No
Jun 21 – Jul 10, 2010	PIMS Summer School, University of Washington	No	Yes
May 10-14, 2010	Conférence ANR MEMEMO, CIRM, Luminy	Yes	No

Other invited talks

2023	Orsay students probability seminar, Université Toulouse 3 Paul Sabatier probability seminar
2021	One World Probability seminar, Waterloo probability seminar (online)
2020	Probability seminar: Université Toulouse 3 Paul Sabatier
2019	Probability seminars: Université de Bordeaux, Université Toulouse 3 Paul Sabatier, Université Paris-Sud, Universität Bochum, Universität Münster
2018	Probability seminars: McGill University, UC San Diego, Texas A&M University, University of Toronto, Courant Institute (NYU), Duke University, Stanford University, Temple/Penn
2017	Probability seminars: University of Bath, Université de Strasbourg, Ecole Polytechnique
2016	Probability seminars: Université Paris-Nanterre ; Université Paris 13 Journées Cartes, IHES
2015	Probability seminars: University of Oxford ; LPMA ; Universität Zürich GdT de l'équipe Modélisation Stochastique, LPMA
2014	Probability seminars: Weizmann Institute of Science, Tel Aviv University et Ben Gurion University, Israël ; École Polytechnique ; Université Lyon 1 ; Université Paris Sud ; Université de Rennes 1 ; Université de Lorraine ; Queen Mary University London ; Ecole Normale Supérieure
2013	Probability seminars: Tel Aviv University and Weizmann Institute of Science, Israël ; GdT Processus Stochastiques, LPMA
2012	Probability seminars: Technion and Weizmann Institute of Science, Israël ; Universität Bonn, Allemagne ; University of Cambridge, Royaume-Uni ; Université de Versailles ; Université Lyon 1 ; Université Paris 13
2011	Informal Seminar, Department of Statistics, University of Oxford, Royaume-Uni ; GdT Processus Stochastiques, LPMA

Teaching experience

At Université Toulouse 3 Paul Sabatier, 128 h/year 2019-21, 64h/year 2021-

Head of Master 1 Higher Education and Research (2021-)

Courses: Stochastic Modeling (4th year), Probability and Statistics (4th year)

Tutorials: Analysis (1st year), Stochastic Modeling (4th year)

Student projects: Supervision of two internship students and 3 other student projects (6 students)

At Université Paris-Sud, approx. 175 hours per year (2014-19à

Courses: Branching random walks and multiplicative cascades (5th year topics course), Computational

Probability and Statistics (4th year), Teaching with *WIMS* (4th year), Applied Probability (3rd year), Numerical methods in Analysis and Probability (3rd year)
Tutorials: Advanced Probability (4th year), Probability and Statistics (3rd year), Probability for biologists (2nd year)
Student projects: Supervision of 6 student projects or Master theses (8 students)

At Université Pierre et Marie Curie, 64 hours per year (2009-12)

Tutorials: Complex Analysis (3rd year), Probability (2nd and 3rd year), Calculus (1st year), Linear Algebra (1st year)

Supervised postdocs

Alexandre Legrand (2021-23), funded by ANR REMECO

PhD students

Louis Chataignier (2023-, co-supervisor Michel Pain), title: *Front fluctuations of branching Brownian motion*

Anthony Muraro (2021-, co-supervisor Manon Costa), title: *Hawkes processes with inhibition*

Fu-Hsuan Ho (2020-23), title: *Asymptotics of variable-speed branching Brownian motion*

Julie Tourniaire (2018-21, co-supervisor Gaël Raoul), title: *Interface dynamics in ecology: deterministic and stochastic models*

Pierre Boutaud (2017-20), title: *Branching random walks: limit cases and minimal hypotheses*

Programming languages/environments

Julia, Python, C/C++, Matlab, Scilab, R, Java, JavaScript, PHP, Perl, Shell script, HTML, CSS

Languages

German (native), French (native), English (fluent), Slovene (conversational)