

# CURRICULUM VITAE

## BÉATRICE DE TILIÈRE

University Paris Dauphine (CEREMADE)  
Place du Maréchal De Lattre De Tassigny  
75775 PARIS Cedex 16  
detiliere@ceremade.dauphine.fr  
<https://www.ceremade.dauphine.fr/~detiliere/>

Birth name: Fässler  
Born on December 25, 1976  
Nationalities French and Swiss  
Married, 2 children

### 1. POSITIONS

---

- 2019 - **Professor**. CEREMADE. University Paris Dauphine.
- 2015 -2018 **Professor**. LAMA. University Paris-Est Créteil.
- 2010 -2015 **Maître de conférences (Assistant Professor)**. LPMA. University Pierre et Marie Curie, Paris.
- 2007 - 2010 **Maître-Assistante (Assistant Professor)**. University of Neuchâtel.
- 2005 - 2007 Swiss National Fund **Post-doctoral position** in the **probability** group of E. Bolthausen. University of Zürich.
- 2004 - 2005 Research and Teaching Position (ATER). University Paris Descartes.

### 2. SCIENTIFIC INTERESTS

---

Statistical mechanics, probability theory, phase transitions, critical phenomena, discrete geometry, combinatorics, complex analysis. Dimer model, Ising model, spanning trees.

### 3. EDUCATION

---

- 2013 **Habilitation à diriger des recherches en Mathématiques.**  
**(Accreditation to supervise research)**. University Pierre et Marie Curie.  
Title: “Exactly solvable models of 2-dimensional statistical mechanics: Ising model, dimer model and spanning trees.”  
Referees: G. Grimmett, C. Sabot, S. Smirnov.  
Jury: B. Duplantier, T. Duquesne, Y. Le Jan, C. Sabot, W. Werner.
- 2001 - 2004 **Ph.D. in Mathematics.** University Paris Sud, Orsay. Grade: “très honorable”.  
Title: “Dimers on isoradial graphs and random interface model in dimension  $2+2$ ”.  
Advisor: R. Kenyon. Reporters: G. Ben Arous, D. Wilson.  
Referees: R. Kenyon, J.-F. Le Gall, Y. Le Jan, G. Schaeffer, W. Werner.
- 2000 - 2001 **Graduate courses in Mathematics.** UC Berkeley.  
Y. Peres: Probability on trees and networks; D. Aldous: Interacting particle systems;  
A. Weinstein: Differentiable manifolds; D. Sarrason: Classical harmonic analysis.
- April 2000 **Engineering Diploma in Mathematics.** EPFL, Lausanne.  
Diploma thesis under the supervision of G. Ben Arous.

## 4. DISTINCTIONS

---

- 2019 Plenary speaker SPA, Northwestern university.  
2017-2022 Junior member of “Institut Universitaire de France”.  
2017 Bronze medal in mathematics of the CNRS.

## 5. SCIENTIFIC AND ADMINISTRATIVE RESPONSIBILITIES

---

### EDITORIAL ACTIVITY

- 2019 - Associate editor, Annales Henri Poincaré (B).  
2021 - Editorial committee, Bulletin and Mémoires of the French Mathematical Society.  
2021 - Associate editor, Esaim P&S.

### GRANTS

- 2019-2023 Member of the projetct ANR DIMERS, investigators C. Boutillier and J. Bouttier.  
2015 Invited researcher, ICERM, Brown university, USA (1 month).  
2014-2015 6 months off teaching duties for research (university).  
2013-2014 6 months off teaching duties for research (CNRS).  
2013-2015 Responsible of the Paris pole of the project ANR-MAC2, investigator V. Beffara.  
2009-2011 Swiss national fund project 200020-130574, 180 KEur. Investigator with M. Benaïm.  
2007-2009 Swiss national fund project 200020-120218, 170 KEur. Investigator with M. Benaïm.

### SUPERVISION - JURYS

#### **PhD supervision**

- Lucas Rey (2022-). Co-advisors: S. Glazman and M. Lis.
- Tristan Pham-Mariotti (2020-). Co-advisor: C. Boutillier.
- Paul Melotti (2015-2019). Co-advisor: C. Boutillier.
- Wangru Sun (2013-2018). Co-advisor: C. Boutillier.

#### **Habilitation referee**

- 2022 Alexander Glazman, University of Vienna.  
2021 Dmitry Chelkak, ENS et Paris Saclay.

#### **Habilitation jury**

- 2020 Julien Poisat, University Paris-Dauphine.  
2020 Marie Albeque, École Polytechnique, Saclay.

#### **Thesis referee**

- 2023 Héloïse Constantin, supervised by A. Kassel, ENS Lyon.  
2021 Elizaveta Arzhakova, supervised by E. Verbitskiy, F. den Hollander, D. Terhesiu, Université Leiden.  
2016 Alexandra Ugolnikova, supervised by O. Bodini and T. Fernique, University Paris-Nord.

#### **Thesis jurys**

- 2023 Benjamin Bonnefont, supervised by Olivier Zindy, Sorbonne Université.  
2022 Laetitia Della Maestra, supervised by Marc Hoffmann, Université Paris-Dauphine.  
2022 Rémy Mahfouf, supervised by Dmitry Chelkak, ENS, Paris.  
2020 Tomas Berggren, supervised by Maurice Duits, KTH, Stockholm, Sweden.  
2019 Mathias Lepoutre, supervised by M. Albenque et V. Pilaux, École Polytechnique, Paris.  
2018 Hugo Vanneuville, supervised by C. Garban, University Lyon I.  
2017 Ahn Minh Pham, supervised by D. Cimasoni, University of Geneva.  
2016 Xiaochuan Yang, supervised by S. Jaffard and S. Seuret, UPEC.  
2016 Franck Gabriel, supervised by T. Lévy, UPMC.  
2014 Aurelia Deshayes, supervised by O. Garet and R. Marchand, University of Lorraine.

#### **Jury (other)**

- 2019 *Séphora Berrebi scholarships for women in advanced mathematics and computer science.*

### Master 2 thesis

- 2022 Gabriel Singer (ESTP), *Self avoiding random walks on the tilted square lattice*.  
2015 Paul Melotti, *Around the bipartite dimer representation of the double Ising model*.  
2014 Aran Raoufi (with C. Boutillier), *Aspects of the 6-vertex model*.  
2013 Wangru Sun, *The critical Z-invariant Ising model via dimers: bi-periodic case and locality property*.

### Master 1 thesis

- 2020 Maximilien Vallet & Doron Israël, *Wilson's algorithm*.

### Bachelor thesis

- 2019 Paul Roux: Math-physics thesis, ENS Bachelor 3rd year, co-supervised with Yacine Ikhlef.

### ORGANISATION - SCIENTIFIC COMMITTEES

---

- March 2024 Workshop: *Statistical Mechanics and Discrete Geometry*, IPAM, Los Angeles.  
Co-organisers: Sanjay Ramassamy, Marianna Russkikh.
- July 2023 *ANR DIMERS closing conference*, Sorbonne Université, Jussieu.  
Co-organisers: Cédric Boutillier, Thierry Lévy, Paul Melotti.
- June 2022 *100 (102!) years of the Ising model*, IHÉS, Bures-sur-Yvette.  
Co-organisers: H. Duminil-Copin, S. Rychkov.
- Dec. 2021 *Forum des jeunes mathématiciennes*, Besançon.  
Member of the scientific program committee.
- July 2021 *World Congress in Probability and Statistics*, Bernoulli Society and IMS, Seoul.  
Member of the scientific program committee.
- Dec. 2018 State of the research of the French Mathematical Society: *Statistical mechanics*, IHP, Paris.  
Co-organisers: C. Boutillier, K. Raschel.
- July 2016 Session: *Integrable models in statistical physics*  
*World Congress in Probability and Statistics* of the Bernoulli Society, Fields Institute Toronto.
- June 2016 Conference: *Statistical mechanics meeting*, University Paris-Est Créteil.  
Co-organisers: A. Le Ny, J. Sohler.
- Print. 2015 Semester: *Phase transitions and emergent properties*, ICERM, Brown university.  
Co-organisers: M. Bowick, R. Kenyon, C. Radin, P. Winkler.
- Dec. 2014 State of the research of the French Mathematical Society: *Random matrices*, IHP, Paris.  
Co-organisers: F. Benaych-Georges, D. Chafaï, S. Péché.
- July 2014 Conference ANR-MAC2: *Critical random models in dimension 2*, UPMC, Paris.  
Co-organisers: C. Boutillier, N. Curien.
- Jan. 2012 Workshop "Connections for women": *Discrete Lattice models in Mathematics, Physics and Computing*, MSRI, Berkeley. Co-organisers: D. Randall, C. Soteros.
- Sept. 2008 Swiss doctoral program, *Probability, Statistical mechanics : intensive courses & workshop*, University of Neuchâtel. Co-organisers: G. Maillard, Y. Velenik.

### REFeree

---

Trans. AMS - Duke Math. Journal - Annals of Probability - Probability Theory and Related Fields - Annals of Applied Probability - Communications in Mathematical Physics - Annales IHP, D - Journal of Combinatorial Theory A - Projet ANR - Journal of Mathematical Physics - Electronic Journal of Probability - European Journal of Combinatorics - Journal of Statistical Physics - Annales Henri Lebesgue - Journal of the European Mathematical Society.

## HIRING COMMITTEES

---

2023	Dauphine (MCF) - Dauphine (Teaching position) - Nanterre (MCF).
2022	Poitiers (PR) - University de Paris (MCF).
2021	Paris-Dauphine (PRAG) - KTH, Stockholm (Assoc. Prof.).
2020	Orsay (MCF).
2019	Paris-Est Marne-la-Vallée (PR) - Paris Diderot (MCF) - Orsay (MCF).
2018	Paris-Est Marne-la-Vallée (PR) - Saint-Etienne (PR) - Sorbonne university (MCF).
2016	Paris-Descartes (PR) - Pierre et Marie Curie (PR) - Paris-Est Créteil (MCF).
2015	Nanterre (MCF).
2014	Nanterre (MCF) - Pierre et Marie Curie (MCF).
2013	Nanterre (MCF).

## MINI-COURSES

---

March 2023	ALEA Days 2023, CIRM, Marseille.
May 2018	Franco-Dutch YEP workshop: <i>Math. stat. mechanics, random graphs and rel. topics</i> , Eurandom.
Jan. 2017	Introductory school to the semester <i>Combinatorics and interactions</i> à l'IHP, CIRM, Marseille.
May 2016	Colloquium <i>Inter'Actions en Mathématiques</i> , ENS, Lyon.
Aug. 2015	CIMPA Summer school: <i>Tilings and tessellations</i> , Isfahan, Iran.
Oct. 2009	State of the research: <i>Dimers and random surfaces: combinatorics and local statistics</i> , IHP, Paris.
Sept. 2008	Swiss doctoral program: <i>The dimer model in Statistical Mechanics</i> , University of Neuchâtel.

## ADMINISTRATIVE DUTIES

---

2023-2027	Director of the "Fondation Sciences Mathématiques de Paris".
2020-2023	Head of the Mathematics doctoral program, University Paris-Dauphine.
2020	Member of the Mathematics graduate program board, University Paris-Dauphine.
2019-	Member of the department board, University Paris-Dauphine.
2019-2022	Member of the gender committee, University Paris-Dauphine.
2018	Deputy director of the LABEX Bézout, University Paris-Est.
2017-2018	Deputy director of the doctoral school MSTIC, University Paris-Est.
2015-2018	Member of the PhD follow-up committee. University Paris-Est Créteil.
2013-2015	Member of the department board. University Pierre et Marie Curie.

## DIFFUSION

---

2023	Talk at a <i>1/2 day for highschool girls</i> , University Paris-Dauphine.
2022	<i>Speed meetings on a 1/2 day for highschool girls</i> , University Paris-Dauphine.
2021	Talk at <i>Maths-Sciences 2021</i> , ENS Paris, zoom.
2020	Talk at <i>Maths-Sciences 2020</i> , ENS Paris, zoom.
2020	Member of the organizing committee of the <i>French Mathematical Society junior contest</i> .
2020	Talk at a <i>1/2 day for highschool girls</i> , University Paris-Dauphine.
2019	Talk at a day <i>Girls exploring math</i> for high school girls, University of Luxembourg.
2018	Round table for high school girls, on the occasion of the <i>Séphora Berrebi scholarship</i> , IHP, Paris.
2017	Event <i>Mathematical games</i> , Saint-Sulpice, Paris.
2011-2012	Event <i>Mathematical games</i> , University Pierre et Marie Curie, Paris.
2010	Article on <i>Stanislas Smirnov</i> . <i>Tangente</i> , 137, p.22.
2009	Co-organiser <i>Mathematical kindergarten</i> , University of Neuchâtel.
2002-2004	Science event, Orsay.

## 6. PUBLICATIONS

---

Publications available at  
<https://arxiv.org/find/all/1/all:+AND+de+tiliere/0/1/0/all/0/1>

### SUBMITTED

21. N. Affolter, B. de Tilière, P. Melotti. The Schwarzian octahedron recurrence (dSKP equation) II: geometric systems. *arXiv:2208.00244*. 45 pages.

### PUBLISHED/ACCEPTED PAPERS

20. N. Affolter, B. de Tilière, P. Melotti. The Schwarzian octahedron recurrence (dSKP equation) I: explicit solutions. *Combin. Theory* **3** (2023), no 2 #15, 1-58.
19. C. Boutillier, D. Cimasoni, B. de Tilière. Minimal bipartite dimers and higher genus Harnack curves. *Probab. Math. Phys.* **4** (2023), no 1, 151–208.
18. C. Boutillier, D. Cimasoni, B. de Tilière. Elliptic dimers on minimal graphs and genus 1 Harnack curves. *Comm. Math. Phys.* **400** (2023). 1071-1136.
17. C. Boutillier, D. Cimasoni, B. de Tilière. Isoradial immersions. *J. Graph Theory.* **99** (2022), no 4, 715–757.
16. B. de Tilière. The  $Z$ -Dirac and massive Laplacian operators in the  $Z$ -invariant Ising model. *Electron. J. Probab.* **26** (2021), paper no. 53, 1–86.
15. C. Boutillier, B. de Tilière, K. Raschel. The  $Z$ -invariant Ising model via dimers. *Probab. Theory Related Fields.* **174** (2019), no 1-2, 235–305.
14. C. Boutillier, B. de Tilière, K. Raschel. The  $Z$ -invariant massive Laplacian on isoradial graphs. *Invent. Math.* **208** (2017), no 1, 109–189.
13. B. de Tilière. Bipartite dimer representation of squared 2d- Ising correlations. *Ann. Inst. H. Poincaré - Comb. Phys. Interact.* **3** (2016), 121–138.
12. B. de Tilière. Critical Ising model and spanning trees partition functions. *Ann. Inst. H. Poincaré - Probab. et stat.* **52** (2016), no 3, 1382–1405.
11. C. Boutillier, B. de Tilière. Height representation of XOR-Ising loops via dimers. *Electron. J. Probab.* **19** (2014), no. 80, 1–33.
10. B. de Tilière. Principal minors Pfaffian half-tree theorem. *J. Combin. Theory Ser. A.* **124** (2014), 1–40.
9. B. de Tilière. From cycle rooted spanning forests to the critical Ising model: an explicit construction. *Comm. Math. Phys.* **319** (2013), no. 1, 69–110.
8. C. Boutillier, B. de Tilière. Statistical mechanics on isoradial graphs. *Probability in Complex Physical Systems, in honor of Erwin Bolthausen and Jürgen Gärtner. Springer Proceedings in Mathematics* **11** (2012), 491–512.
7. C. Boutillier, B. de Tilière. The critical  $Z$ -invariant Ising model via dimers: locality property. *Comm. Math. Phys.* **301** (2011), no. 2, 473–516.
6. C. Boutillier, B. de Tilière. The critical  $Z$ -invariant Ising model via dimers: the periodic case. *Probab. Theory Related Fields* **147** (2009), no. 3, 379–413.
5. E. Bolthausen, F. Caravenna, B. de Tilière. The quenched critical point of a diluted disordered polymer model. *Stochastic Process. Appl.* **119** (2009), 1479-1504.
4. C. Boutillier, B. de Tilière. Loops statistics in the honeycomb dimer model. *Ann. Probab.* **37** (2009), no. 5, 1747–1777.

3. B. de Tilière. Partition function of isoradial dimer models.  
*Probab. Theory Related Fields* **138** (2007), no. 3-4, 451–462.
2. B. de Tilière. Quadri-tilings of the plane.  
*Probab. Theory Relat. Fields* **137** (2007), no. 3-4, 487–518.
1. B. de Tilière. Scaling limit of isoradial dimer models & the case of quadri-tilings.  
*Ann. Inst. H. Poincaré Sect. B* **43** (2007), no. 6, 729–750.

## CHAPTERS

---

B. de Tilière. The dimer model in statistical mechanics, dans le vol. *Dimer Models and Random Tilings*. Edited by C. Boutillier, N. Enriquez. *Panoramas et synthèses* **45** (2015).

## 7. TALKS IN CONFERENCES/COLLOQUIUM

---

- Workshop, *PIICQ*, Angers University (May 2023).
- Colloquium, *Probability and Data Science*, University of Connecticut (May 2023).
- Workshop, *Mathematical physics*, Les Diablerets (Feb. 2023).
- Workshop, *Stochastic analysis*, Luxembourg (Feb. 2023).
- Conference, *Dutch stochastics meeting*, Lunteren (Nov. 2022).
- Conference, *Discretization in Geometry and Dynamics*, Magdeburg (Oct. 2022).
- Conference, *Randomness, Integrability and Universality*, GGI, Florence (May 2022).
- Colloquium, *MAP5*, University of Paris (Jan. 2022).
- Colloquium, *Lorrain de Mathématiques*, Nancy (Nov. 2021).
- Conference, *Journées MAS 2020*, Orléans (Aug. 2021), zoom talk.
- Colloquium, *Mathematics department*, Potsdam (April 2021), zoom talk.
- Conference, *AMS sectional meeting*, online (March 2021), zoom talk.
- Workshop, *Higher Structures Emerging from Renormalisation*, ESI, Vienna (October 2020), zoom talk.
- Conference, *3rd congress of the French Mathematical Society*, Nancy (May 2020)<sup>†, 1</sup>.
- Colloquium, *Probability*, Bath and Bristol (March 2020)<sup>†</sup>.
- Workshop, *Mathematical physics*, Les Diablerets, Suisse (Feb. 2020).
- Workshop, *Dimers, Ising Model, and their Interactions*, Banff (Nov. 2019).
- Plenary speaker, *SPA*, Northwestern University (July 2019).
- Summer school, *GRaphes et Arbres ALéatoires*, CIRM (July 2019).
- Conference, *Probability and quantum field theory*, Porquerolles (June 2019).
- Colloquium, *Discretization in Geometry and Dynamics*, TU Berlin (June 2019).
- Conference in honor of François Dunlop, Florence (April 2019).
- Oberwolfach Workshop, *Scaling Limits in Models of Statistical Mechanics* (sept. 2018).
- Workshop, *Random Geometry*, Newton Institute, Cambridge (July 2018).
- Conference, *Random matrices, maps and gauge theories*, ENS Lyon (June 2018).
- Oberwolfach Workshop, *Enumerative Combinatorics* (May 2018).
- Mathematics colloquium, Strasbourg (April 2018).
- Joint China-France-Russia Symposium on *Probability Theory*, University of Beijing (sept. 2017).
- Colloquium, Montpellier (June 2017).
- Conference, *1st congress of the French Mathematical Society*, Tours (June 2016).
- Conference, *Women in Probability*, TU München (June 2016).

---

<sup>1</sup>Events marked with † have been canceled because of Covid-19.

- Conference, *Journées ALEA*, CIRM, Marseille (March 2016).
- Conference, *Fields Medal Symposium in honor of S. Smirnov*, Fields Institute, Toronto (Oct. 2015).
- Conference, *Random Interface and Integrable Probability*, GGI, Florence (June 2015).
- Seminar *Philippe Flajolet*, Institut Henri Poincaré, Paris (June 2015).
- Workshop, *Limit shapes*, ICERM-Brown, Providence (April 2015).
- Conference, *Conformally Invariant Scaling Limits*, Newton Institute, Cambridge (Fev. 2015).
- Conference, *Inhomogeneous Random Systems*, IHP, Paris (Fev. 2015).
- Conference, *Journées MAS*, Toulouse (Aug. 2014).
- Workshop, *2D-Quantum Gravity and Statistical Mechanics*, Vienne (June 2014).
- Conference, *Young Women in Probability*, Bonn (May 2014).
- Conference, *Journées de combinatoire de Bordeaux* (Feb. 2014).
- Conference, *Branching diffusions and GFF in physics, probability and number th.*, Marchéille (June 2013).
- Conference, *Two-dimensional Statistical Mechanics*, Les Diablerets, Suisse (Feb. 2013).
- Conference, *Conformal invariance, discrete holomorphicity and integrability*, Helsinki (June 2012).
- Conference, *Introductory workshop: Lattice models and Combinatorics*, MSRI, Berkeley (Janv. 2012).
- Conference, *Disordered systems*, Nantes (June 2011).
- Conference, *Erwin Bolthausen's 65<sup>th</sup> birthday*, TU Berlin (Oct. 2010).
- Conference, *Women in probability*, TU München (July 2010).
- Conference, *Conformal maps from probability to physics*, Ascona, Suisse (May 2010).
- Spring school *Stochastic Models of Complex Processes*, Potsdam (March 2007).
- Conference, *Stochastic processes in mathematical physics*, Florence (June 2006).

## SEMINAR TALKS

---

Probability and modelling seminar, **LPSM, University Paris Cité** (03/24) - Applied Mathematics seminar, **Collège de France** (12/22) - Autumn day of ANR DIMERS, **IPHT, Saclay** (10/22) - Probability seminar, **LPSM, Sorbonne U.** (11/2021) - Probability seminar, **Orsay** (04/2021) (zoom) - Probability seminar, **Durham University** (01/2021) (zoom) - Probability seminar, **University College, Dublin** (01/2021) (zoom) - Combinatorics and interactions seminar, **IHP, Paris** (11/2019) - Analysis and Probability seminar, **Dauphine** (09/2019) - Working group *ESCAPADE*, **Dauphine** (02/2019) - Probability seminar, **Toulouse** (06/2018) - Stochastic calculus seminar, **Strasbourg** (04/2018) - Probability seminar, **Rennes** (12/2017) - Combinatorics seminar IRIF, **University Paris-Diderot** (10/2017) - *Dimer days*, **University Paris-Nord** (12/2016) - Probability seminar, **Grenoble** (06/2016) - Mathematical physics seminar, **University of Geneva** (04/2016) - Seminar über stochastische Prozesse, **Universität Zürich** (04/2016) - Seminar SCAM, **University Paris-Est Créteil** (03/2016) - Tropical geometry seminar, UPMC **Paris** (06/2015) - Probability and statistics seminar, **Tours** (06/2015) - Mathematical physics and Probability seminar, **Courant Institute, NYU** (05/2015) - Probability and statistics seminar, **Paris 13** (03/2015) - Probability and statistics seminar, **Nancy** (03/2015) - Probability and statistics seminar, **Lyon I** (02/2015) - Working group, *Stochastic modelling*, **Paris Diderot** (02/2015) - Probability and statistics seminar, **Orsay** (01/2015) - Working group, *Probability, Ergodic theory and dynamical systems*, **Rouen** (11/2014) - *Combinatorics day* **Paris** (11/2014) - Seminar *Des Mathématiques*, École Normale Supérieure, **Paris** (03/2014) - Probability seminar, **Grenoble** (12/2013) - *Random maps* seminar, **École Polytechnique** (12/2013) - Probability seminar, **Marseille** (01/2013) - Mark Kac seminar, **Utrecht** (12/2012) - Working group, *Les probas du vendredi*, UPMC **Paris** (11/2012) - Probability seminar, **Geneva** (10/2012) - Probability seminar, **Cambridge** (11/2011) - Probability seminar, **Orléans** (09/2011) - Probability seminar, **TU Bonn** (06/2011) - Random maps day, **Amiens** (03/2011) - Stochastic analysis seminar, **Oxford** (11/2010) - Probability seminar, UPMC **Paris** (11/2010) - Probability seminar, **ENS Lyon** (03/2010) - Probability seminar, **Orsay** (05/2009) - Working group, *Stochastic processes and random matrices*, LPMA **Paris** (03/2009) - Mathematical physics seminar, **Geneva** (12/2008). Probability seminar, **ENS Lyon** (03/2007) - Swiss probability seminar, **Berne** (05/2006) - Probability seminar, **Zürich** (02/2006) - Dobrushin seminar, **Marseille** (01/2006) - Dynamics, Arithmetics and Combinatorics seminar, **Marseille** (01/2006) - Graduate colloquium, **Zürich** (12/2005) - Probability seminar, **Nancy** (01/2005) - Probability seminar, **Orléans** (01/2005) - Colloquium for young probabilists and statisticians, **Aussois** (04/2004) - Working group, *Statistical mechanics*, **Orsay** (12/2003) - Thematic day, *Statistical mechanics*, **Orsay** (06/2002).

## 8. TEACHING, FROM 2004 -

---

### UNIVERSITY PARIS-DAUPHINE, 2019 -

#### MASTERS IN MATHEMATICS

- 2nd year: Theoretical and applied mathematics  
Course, *Introduction to statistical mechanics* (15 h/year) (2019-).
- 1st year: Mathematics  
Course/Exercises, *Controlled Markov chains* (39h/year) (2019- ).

#### BACHELOR IN MATHEMATICS & COMPUTER SCIENCE

- 2nd year: Exercises, *Calculus IV* (39h/year) (2022-2023).
- 2nd year: Exercises, *Probability* (18h/year) (2018-2019).

### UNIVERSITY PARIS-EST CRÉTEIL, ENGINEERING SCHOOL, 2015 - 2018

#### ENGINEERS

- 3rd year: Course/Exercises, *Discriminant analysis* (20 h/year) (2015-2016).
- 2nd year: Course/Exercises, *Data mining* (72 h/year) (2015-2017), (16h/year) (2017-2018).
- 1st year: Course/Exercises, *Markov chains* (32 h/year) (2016-2018).

#### BACHELOR

- 1st year: Course/Exercises, *Statistics and probability* (42 h/year) (2015-2017).

### UNIVERSITY PIERRE AND MARIE CURIE - PARIS, 2010-2019

#### MASTERS IN MATHEMATICS

- 2nd year: Probability and random models  
Course, *Dimer model and random tilings* (12 h/year) (2013-2019).
- For teaching of Mathematics  
- 2nd year: *Probability* (20 h/year) (2010-2013).  
- 1st year: Course/Exercises, *Probability and statistics* (48 h/year) (2010-2015).
- M1: Exercises, *Stochastic models and application to finance* (72 h/year) (2010-2013).

#### BACHELOR

- 3rd year: Exercises, *Probability* (36 h/year) (2014-2015).
- 1st year: *Employment integration* (20 h/year) (2013-2014).

### UNIVERSITY OF NEUCHÂTEL (SWITZERLAND), 2007 - 2010

- Masters in Mathematics, 1st year. *Probability seminar for students* (2010).
- Bachelor in Biology, 3rd year. Course, *Multivariate statistics* (10 h/year) (2007-2010).
- Bachelor in Mathematics, 2nd year. Course, *Multivariate analysis* (28 h/year) (2007-2010).

### UNIVERSITY OF ZÜRICH, 2005 - 2007

- Course, *Bio-computer science* (10 h/year).
- Exercises, *Introduction to stochastic processes*.

### UNIVERSITY PARIS-DESCARTES, 2004 - 2005

- Exercises, *Scilab, Numeration systems*.