Curriculum vitae

<div align="right">Igor Kortchemski</div>

French citizenship.

Professional addresses: CMAP, École polytechnique, Route de Saclay, 91128 Palaiseau Cedex, France and Department of Mathematics, Rämistrasse 101, 8092 Zurich, Switzerland

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Positions held

2015 –	**CNRS researcher**, *École polytechnique*, Palaiseau.	
2015 –	**Part time Professor**, *Applied Mathematics Department, École polytechnique*, Palaiseau.	
2023 – 2024	**Visiting Professor**, *ETH Zurich, Department of Mathematics*.	
2014 – 2015	**Postdoc**, *Zürich Universität*, Zürich.	
2012 – 2014	**Agrégé-préparateur (∼ Lecturer)**, *École Normale Superieure*, Paris.	
2011 – 2012	**Doctorant contractuel (PhD grant)**, *Université Paris-Sud*, Orsay.	

Education

2016	**Habilitation HDR**, *Université Paris-Sud*, Orsay.
2012	**PhD**, *Université Paris-Sud, advised by Jean-François Le Gall*, Orsay.
2010	**Master**, *Major in probability theory*, Université Paris-Sud, Orsay. Summa Cum Laude
2009	**Agrégation externe de mathématiques**. Competitive examination in the French public education system.
2008	**Licence 3 de mathématiques (BS in Mathematics)**, Université Paris-Sud/ENS. Summa Cum Laude
2007	**Admission to École Normale Supérieure (Paris)**.

Publications and preprints

Preprints

✎ I. Kortchemski, C. Marzouk "Random Lévy Looptrees and Lévy Maps ", arXiv:2402.04098

✎ L. Addario-Berry, S. Donderwinkel, I. Kortchemski, "Critical trees are neither too short nor too fat ", arXiv:2311.06163

✎ É. Bellin, A. Blanc-Renaudie, E. Kammerer, I. Kortchemski, "Uniform attachment with freezing", arXiv:2308.00493.

Publications

☞ É. Bellin, A. Blanc-Renaudie, E. Kammerer, I. Kortchemski, "Uniform attachment with freezing: scaling limits", *Ann. Inst. H. Poincaré Probab. Statist.*, to appear.

☞ I. Kortchemski, P. Thévenin, "Coupling Bertoin's and Aldous-Pitman's representations of the additive coalescent", *Random Struct. Alg.* (to appear)

☞ I. Kortchemski, C. Marzouk "Large deviation Local Limit Theorems and limits of biconditioned Trees and Maps", *Ann. Appl. Probab.* **33(5)**: 3755-3802 (2023).

☞ N. Curien, I. Kortchemski, C. Marzouk, "The mesoscopic geometry of sparse random maps ", *J. Éc. polytech. Math.* **9** 1305-1345 (2022).

☞ J. Bertoin, N. Curien, I. Kortchemski, "On conditioning a self-similar growth-fragmentation by its intrinsic area", *Ann. Inst. H. Poincaré Probab. Statist.* **57 (2)** 1136 - 1156 (2021).

☞ I. Kortchemski, L. Richier, "The boundary of random planar maps via looptrees", *Ann. Fac. Sci. Toulouse Math.* **(6)** 29, no. 2, 391–430 (2020).

☞ V. Féray, I. Kortchemski, "Trajectories in random minimal transposition factorizations" *ALEA, Lat. Am. J. Probab. Math. Stat.* **16**, 759–785 (2019).

☞ I. Kortchemski, L. Richier, "Condensation in critical Cauchy Bienaymé-Galton-Watson trees", *Ann. Appl. Probab.* **29(3)** 1837-1877 (2019).

☞ V. Féray, I. Kortchemski, "The geometry of random minimal factorizations of a long cycle via biconditioned bitype random trees", *Ann. H. Lebesgue* **1** 109-186 (2018).

☞ J. Bertoin, T. Budd, N. Curien, I. Kortchemski, "Martingales in self-similar growth-fragmentations and their connections with random planar maps", *Probab. Theory Related Fields* **172(3)**, 663-724 (2018).

☞ J. Bertoin, N. Curien, I. Kortchemski, "Random planar maps & growth-fragmentations", *Ann. Probab.* **(46)(1)** 207-260 (2018)

☞ I. Kortchemski, C. Marzouk "Simply generated non-crossing partitions", *Combin. Probab. Comput.* **26(4)** 560–592 (2017).

☞ I. Kortchemski, "Sub-exponential tail bounds for conditioned stable Bienaymé–Galton–Watson trees", *Probab. Theory Related Fields* **168(1-2)** 1-40 (2017).

☞ J. Bertoin, I.Kortchemski "Self-similar scaling limits of Markov chains on the positive integers", *Ann. Appl. Probab.* **26(4)** 2556-2595 (2016).

☞ I.Kortchemski, "Predator-prey dynamics on infinite trees: a branching random walk approach", *J. Theor. Probab.* **29** 1027-1046 (2016).

☞ I. Kortchemski, C. Marzouk "Triangulating stable laminations", *Electron. J. Probab.* **21(11)**, 1–31 (2016).

☞ N. Curien, I. Kortchemski, "Percolation on random triangulations and stable looptrees", *Probab. Theory Related Fields* **163(1-2)** 303–337 (2015).

☞ N. Curien, B. Haas, I. Kortchemski, "The CRT is the scaling limit of random dissections", *Random Struct. Alg.* **47(2)** 304–327 (2015).

☞ I. Kortchemski, "Limit theorems for conditioned non-generic Galton–Watson trees", *Ann. Inst. H. Poincaré Probab. Statist.* **15(2)**, 489–511 (2015).

☞ N. Curien, T. Duquesne, I.Kortchemski, I. Manolescu, "Scaling limits and influence of the seed graph in preferential attachment trees", *J. Éc. polytech. Math.* **2** 1-34 (2015).

☞ I.Kortchemski, "A predator-prey SIR type dynamics on large complete graphs with three phase transitions", Stoch. Proc. Appl. **125(3)** 886–917 (2015).

☞ N. Curien, I. Kortchemski, "Random stable looptrees", *Electron. J. Probab.* **19(108)**, 1–35 (2014).

☞ N. Curien, I. Kortchemski, "Random non-crossing plane configurations: A conditioned Galton-Watson tree approach", *Random Struct. Alg.* **45(2)**, 236–260 (2014).

☞ I. Kortchemski, "Random stable laminations of the disk", *Ann. Probab.* **42(2)**, 725–759 (2014).

☞ I. Kortchemski, "A simple proof of Duquesne's theorem on contour processes of conditioned Galton-Watson trees", *Séminaire de Probabilités XLV*, Lecture Notes in Mathematics, 537–558 (2013).

☞ I. Kortchemski, "Invariance principles for Galton-Watson trees conditioned on their number of leaves", *Stoch. Proc. Appl.* **122** 3126–3172 (2012).

☞ I. Kortchemski, "Asymptotic study of permutation records", *J. Comb. Theory Ser. A*, **116** 1154-1166 (2009).

☞ I. Kortchemski, "Good Sequences, Bijections and Permutations", *Undergrad. Math J.* **6(2)** (2005).

Conference proceedings

☞ A. Contat, J.-F. Delmas, J.-J. Duchamps, I. Kortchemski, M. Nassif, "On random trees and forests" *ESAIM: ProcS* **74** 19-37 (2023)

☞ C. Abraham, J.Bettinelli, G. Collet et I. Kortchemski, "Random maps", *ESAIM: Proceedings* **51** 133-149 (2015)

Books and book chapters

☞ *Probabilités - Classes préparatoires scientifiques* (with Roger Mansuy), Vuibert, 272 pages, 2018. ISBN : 978-2-311-40527-9.

☞ *Arbres et marches aléatoires*, Journées mathématiques X-UPS 2016. Editorial committee: Pascale Harinck, Alain Plagne, Claude Sabbah. Authors: Vincent Beffara, Igor Kortchemski, Grégory Miermont.

Popular-science articles

✏ N. Curien, I. Kortchemski, "Raconte moi ... l'arbre brownien continu" *Gaz. Math.* **162** 51-59 (2019).

✏ I. Kortchemski, "Autour des diviseurs premiers de $a^n \pm b^n$", *RMS* **125-4** (2015).

✏ X. Caruso, I. Kortchemski, "Statistiques du nombre de cycles d'une permutation", *RMS* **121-4** (2011).

✏ I. Kortchemski, "Bonnes suites et permutations", Quadrature **62**, 24-34 (2006).

▬ Awards and distinctions

2013 **Perrissin–Pirasset / Schneider PhD prize awarded by the Chancellery of the University of Paris**.

2006 **International Physics Olympiad**, Singapour.
Silver medal

2005 **Fermat Junior prize**, *for the work* Bonnes suites et permutations.

2005 **International Mathematical Olympiad**, Mérida, Mexico.
Bronze Medal

2005 **Concours Général in mathematics**.
First prize. The Concours General is a highly national competitive contest for 12th grade students.

2004 **International Mathematical Olympiad**, Athens, Grece.
Bronze Medal

2004 **Olympiades Académiques de Mathématiques**.
First prize. The Olympiades Academiques is a highly competitive national contest for 11th grade students.

▬ Referee work

ALEA–Latin American Journal of Probability and Mathematical Statistics (x8), *Annals of Applied Probability* (x2), *Annals of Probability* (x4), *Annales de l'Institut Henri Poincaré Probabilités et Statistiques* (x7), *Bernoulli* (x2), *Combinatorics, Probability and Computing* (x3), *C. R. Acad. Sci. Paris* (x1), *Discrete Mathematics* (x1), *Electronic Communications in Probability* (x2), *Electronic Journal of Probability* (x11), *Israel Journal of Mathematics* (x1), *ESAIM: Probability and Statistics* (x1), *Journal of Applied Probability* (x2), *Probability Theory and Related Fields* (x6), *Random Structures and Algorithms* (x7), *Statistics and Probability Letters* (x2), *Stochastic processes and their applications* (x1).

▬ Invitations at international events

2024   2024 PIMS-CRM Probability summer school – *invited mini-course*.

2023	LMS Research School on Probability (Random Structures, Applied Probability and Computation) – *invited plenary talk*.
2022	Conference Random Geometry (CIRM) – *invited talk*.
2021	Random excursions with Jean Bertoin (a conference in honour of Jean Bertoin's 60th birthday) – *invited talk*.
2020	Regeneration, Branching And Decomposability (Kyiv) – *invited talk* – postponed due to Covid
2019	Random Trees and Graphs Summer School (CIRM)– *invited course*.
2018	Seventh Strasbourg-Zürich Meeting : Frontiers in Analysis and Probability (Strasbourg) – *invited talk*.
2018	Young Probabilists Workshop (Chern Institute of Mathematics) – *invited talk*.
2018	Spring School about Spin Systems (Darmstad) – *invited talk*.
2017	SPA 2017 (Moscow) – *talks in two invited sessions*
2016	Lévy 2016 Summer school on Lévy processes – *Invited lecture*
2015	SPA 2015 (Oxford) – *talk in an invited session*
2014	11th International Vilnius Conference on Probability and Mathematical Statistics, SIAM conference on discrete mathematics 2014 (Minneapolis) – *talks in invited sessions.*
2013	Symposium of Probability and Stochastic Processes à Guanajuato (Mexique)– *talk in an invited session.*
2012	Rhein-Main-Kolloquium Stochastik, CLAPEM 2012 (Chili) – *talk in an invited session.*

Invited talks

2023	Master class at Nancy (5h lecture), Probability seminar in LAGA (Paris-Nord), 2nd RandNet meeting (Prague), 11th Itzykson seminar (IHES)
2022	Probability seminars in LPSM and Marseille
2021	Uppsala, Marseille (postponed due to Covid) and Montréal probability seminars, MAS days, EDMH doctoral school welcome day
2020	Working group (École polytechnique), Mannheim probability seminar (postponed due to Covid) Oxford probability seminar.
2019	Journées de combinatoire de Bordeaux, Journée cartes (Paris-Diderot), Journée parité 2019, Nanterre probability seminar
2018	Probability seminar in Toulouse, Philippe Flajolet Seminar, Random Geometry followup workshop (Newton Institute, Cambridge), 7th seminar"Frontiers in analysis and probability" (Strasbourg), workshop on Branching-Type Structures (Zürich), working seminar (CMAP)
2017	Seminar of the thematic trimester *Combinatorics and interactions* at IHP.
2016	Probability seminar in Nice, Oxford, Paris 6 and Zürich, X-UPS 2016 days, Lévy 2016 Summer school on Lévy processes (invited lecture), Opening days of the Master of Fondation Mathématique Jacques Hadamard (invited lecture), Stable Processes Workshop (CMO, Oaxaca), Growth-fragmentation day at Paris 13.
2015	Zürich Spring School on Lévy Processes (Invited lecture, joint with N.Curien), 3rd Lévy Workshop (Mannheim), Workshop Random Planar Structures (Newton Institute, Cambridge), Probability seminar (Bonn), Combinatorics seminar (Liafa, Paris 7), Colloquium (Paris 5), Probability working group (École polytechnique), Midlands Probability Theory Seminar (Warwick)
2014	Swiss probability seminar (Bern), workshop Probability on Trees and Planar Graphs (Banff, Canada), Journées MAS 2014 in Toulouse (two talks), conférence Two-Dimensional statistical mechanics (Les Diablerets). Probability seminars at Queen Mary (London), Zürich, Cambridge, Bath, ENS Paris.
2013	Journées Alea in Europe (Marseille), Students Probability Day at the Weizmann Institute (Israel), Working group *Les probas du vendredi* (Paris 6), Journée Cartes Aléatoires, Journées Aléa 2013. Probability seminars in Lyon, Orsay, Nancy, Grenoble, Dauphine.

2012   Journée de rentrée at DMA (ENS Paris), Workshop on Continuum Random Trees and Applications (Marseille), Journées MAS (Clermont-Ferrand), PIMS summer school 2012 (Vancouver), ANR A3 seminar, Colloque jeunes probabilistes et statisticiens (Marseille), Workshop Young European Probabilists (Eindhoven), Graduate students séminal (Orsay), Journée des doctorants (Orsay). Probability seminars in Lille, Versailles, Paris 13, Marseille, École Polytechnique, Genève, MIT, Grenoble.

2011   Journées ANR A3 (Orléans), Saint Flour summer school, ANR A3 seminar, Working group on random maps (Orsay), Graduate students in probability seminar (Paris 6), Probability seminar in Angers.

Teaching and mentoring

Mentoring

2023 –   **Antoine Aurillard**, *PhD student (co-supervised with Bruno Schapira)*.

2023 –   **Vanessa Dan**, *PhD student (co-supervised with Cyril Marzouk)*.

2023 – 2023   **Étienne Bellin**, *PhD student*.

Publications during the PhD:
– E. Bellin, "Random monotone factorisations of the cycle", preprint (arXiv:2204.09357)
– E. Bellin, "On the independence number of random trees via tricolourations", 33rd International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2022). LIPICS vol. 225.
– E. Bellin, "Asymptotic behaviour of the first positions of uniform parking functions", preprint (arXiv:2108.08661), to appear in *Journal of Applied Probability*.
– E. Bellin, "Degrees in random uniform minimal factorizations", Discrete Math. **345**, no. 3, Paper No. 112715 (2022).

2017 – 2020   **Paul Thévenin**, *PhD student*.

Publications during the PhD:
– P. Thévenin, "Vertices with fixed outdegrees in large Galton-Watson trees", *Electron. J. Probab.* **25** (2020), paper no. 64, 25 pp.
– P. Thévenin, "A geometric representation of fragmentation processes on stable trees", *Ann. Probab.* **49(5)**: 2416-2476 (2021).
– P. Thévenin, "Random stable type minimal factorizations of the n-cycle", Adv. Appl. Probab. **54**, No. 1, 1-63 (2022).
– P. Melotti, S. Ramassamy, P. Thévenin, "Cube moves for s-embeddings and α-realizations", to appear in *Annales de l'Institut Henri Poincaré D, Combinatorics, Physics and their Interactions*.
– P. Melotti, S. Ramassamy, P. Thévenin, "Points and lines configurations for perpendicular bisectors of convex cyclic polygons", Electronic Journal of Combinatorics, **29(1)**, 1-59, 2022.

2017 – 2018   **Loïc Richier**, *Postdoc student*.

Publications during the postdoc:
– I. Kortchemski, L. Richier "The boundary of random planar maps via looptrees", *Ann. Fac. Sci. Toulouse Math.* **(6)** 29, no. 2, 391–430 (2020)
– I. Kortchemski, L. Richier "Condensation in critical Cauchy Bienaymé-Galton-Watson trees", *Ann. Appl. Probab.* **29(3)** 1837-1877 (2019).

2023   **Antoine Aurillard**, *Masters thesis (co-supervised with Bruno Schapira)*.

2023   **Vanessa Dan**, *Masters thesis (co-supervised with Vanessa Dan)*.

2021   **Audrey Bergès, Félix Rebotier & Agathe Senellart**, *short Masters research project*.

2021   **Otaro Ishida & Marius Potfer**, *short Masters research project*.

2021   **Florent Michel, Jean-Baptiste Soubaras, Shouda Wang**, *short Masters research project*.

2020   **Étienne Bellin**, *Masters thesis*.

2018   **Ismaël Cahu, Ruiwen Dong, Yassine Hamdi, Yassine Lahna & Mohamed Mimouna**, *Masters research project*.

2017   **Paul Thévenin**, *Masters thesis*.

2017   **Agathe Soret & Philippe Cherabier**, *short Masters research project*.

2016   **Chenlin Gu**, *short masters research project*.

2014   **Élie Casbi & Kaitong Hu**, *Bachelor thesis*.

Teaching at doctoral/graduate level

2020 – **Graduate course "Théorèmes limites et applications"**, *Master de l'Aléatoire, Université Paris-Saclay*.
- Instructor, 30h course, course webpage.

2023 **Course "Condensation in random trees"**, *Master class at Nancy University*.
- Instructor, doctoral level course (5h course).

2019 **Course "Condensation in random trees"** , *Random Trees and Graphs Summer School (CIRM)*.
- Instructor, doctoral level course (3 lectures of 1h15 and one 1h15 exercise session).

2016 **Invited course "Lévy processes and large random discrete structures"**, *Lévy 2016 summer school on Lévy processes*.
- Lecture *Lévy processes and large random discrete structures* for graduate students (6 hours).

2014 – 2015 **Graduate course "Geometry of random trees"**, *Université de Zürich*.
- Instructor, course for master and PhD students (26 hours).

Teaching at masters level

2019 – **Course "Advanced probability topics"**, *École polytechnique*.
- Instructor and creator of the course (36 hours, in English, 4/5th year students), course webpage

2023 **Course "Probability theory"**, *ETH Zurich*.
- 42 hours, course webpage

2015 – 2020 **Simulation projects"Simulation of rare events"**, *École polytechnique*.
- Head instructor: Emmanuel Gobet (30 heures, 4th year students).

2016 **Invited course "Random walks and random trees"**, *Journée de rentrée des Master de la Fondation Mathématique Jacques Hadamard*.
- Lecture for Master students (4h30).

Teaching at undergraduate level

2023 – **Course "Analysis IV"**, *USTC, China-France Mathematics Talents Class*.
- Instructor (36 hours, 2nd year students). course webpage

2016 – 2019 **Course "Discrete mathematics"**, *École polytechnique*.
- Instructor and creator of the course in the Bachelor program of École polytechnique (24 hours, in English, 1st year students). course webpage

2015 – 2018 **Exercise sessions for the course "Probability theory"**, *École polytechnique*.
- Tutorial assistant (head instructor: Sylvie Méléard then Josselin Garnier, 36 hours, 3rd year students)

2016 **Course "Advanced probability"**, *PSL (Paris-Sciences-Lettres)*.
- Instructor (36 hours, 2nd year students).

2012 – 2014 **Agrégé préparateur (∼ Lecturer)**, *ENS Paris*.
- TA for the course *Measure theory and Probability* intended for first year students in ENS Paris and tought by Zhan Shi (2012-2013) and Thomas Duquesne (2013-2013), 56 hours per year.
- "Leçon de mathématiques", intended for second year students in ENS on the theme *Arbres aléatoires: thème et variations* (4 hours course, then five one-hour long presentations by students).

2011 – 2012 **Ph.D grant**, *Université Paris-Sud*, Orsay, 64 heures of teaching.
- 50 hours of teaching at Polytech' Paris-Sud (Engineering school), as TA for the mathematics course for fist year students, taught by Pascal Auscher.
- 16 hours of mathematics oral interrogations for first-year university students in Biology.

Teaching at professional development level

2016   **Invited course invité "Random trees and random walks"**, *Journées X-UPS 2016*.
- Course for mathematic teachers in Classes Préparatoires (2 hours)

Oral interrogations

2015 – 2016   **Oral interrogations in mathematics in the second year of *classes préparatoires* (MP*) in lycée Louis-le-Grand**.

2012 – 2014   **Oral interrogations in mathematics in the second year of *classes préparatoires* (MP*) in lycée Louis-le-Grand**.

2008 – 2012   **Oral interrogations in mathematics in the first year of *classes préparatoires* (MPSI) in lycée Louis-le-Grand**.

2008   **Oral interrogations in mathematics in the second year of *classes préparatoires* (MP*) in lycée Louis-le-Grand**.

Doctoral evaluation

2020   **Examiner of Mickaël Maazoun's thesis**.
"Permutons limites universels de permutations aléatoires à motifs exclus" under the supervision of Grégory Miermont.

2019   **Reviewer and examiner of Jean-Jil Duchamps's thesis**.
"Phylogénies aléatoires stucturées" under the supervision of Amaury Lambert.

2018   **Examiner of Camille Pagnard's thesis**.
"Limites locales et profils de grands arbres Markov branchants", Université Paris-Dauphine, under the supervision of Bénédicte Haas.

2017   **Examiner of Loïc Richier's thesis**.
"Géométrie et percolation sur des cartes à bord aléatoires",ÉNS Lyon, under the supervision of Grégory Miermont.

2016   **Reviewer and examiner of Quan Shi's thesis**.
"Fragmentations, growth-fragmentations, and random structures" , Zürich University, under the supervision of Jean Bertoin.

2015   **Reviewer and examiner of Alessandra Caraceni's thesis**.
"The geometry of large outerplanar and half-planar maps" , Université Paris-Sud and l'ÉNS de Pise, under the supervision of Nicolas Curien and Franco Flandoli.

2015   **Examiner of Cyril Marzouk's thesis**.
"Random trees, fires and non-crossing partitions", Zürich University, under the supervision of Jean Bertoin.

▬▬▬ Scientific outreach

2017 –   **Animation of a stand at the annual national Science Festival**, *École polytechnique*.

2020   **General public presentation at Parlons Maths**, Online math seminar for high school students.

2020   **General public presentation at Aromaths**, Seminar for BSc/MSc students at Sorbonne Université.

2019   **General public presentation at the national award ceremony of the Olympiades Académiques de Mathématiques de Première**.

2019   **Supervisor of the team "les i-pi" at TFJM^2**.

2018   **General public presentation at a *MATh.en.JEANS* congress**, *Berlin*.

2017   **General public presentation (for 800 people) during the *Pi tour***.

2006 – 2017   **Training of the French team for International Mathematical Olympiads**.

2008 – 2017   **Teaching at mathematical olympiad camps**.
The goal of these camps, organized by Animath, is to teach "olympiad" style mathematics to young students in high school.

2012 – 2016	**Team leader and deputy leader of the French team to different Mathematical Olympiads**, *Mediterranean Youth Mathematical Competition 2015 (Trieste, Italy), Junior Balkan Mathematical Olympiad 2013 (Antalya, Turkey), Balkan Mathematical Olympiad 2012 (Antalya, Turkey).*
2011	**Team Leader of the Louis-le-Grand team at TFJM.** The "French Tournament of Young Mathematicians" (TFJM), is the French version of the "International Tournament of Young Mathematicians"
2010	**Team Leader of team France 3 at the ITYM.** The "International Tournament of Young Mathematicians" (ITYM) is a mathematics competitions intended for teams of high school students, who have several months to solve (open) mathematical problems known several months in advance, under the supervision of their "Team Leaders"

Administrative and scientific duties

Scientific duties

2022 –	**Elected member at CSA (Comité Social d'Administration $\sim$ technical committee) of École polytechnique.**
2021 –	**Co-chair of the teaching services of PhD students (Applied mathematics department, École polytechnique).**
2020 –	**Jury member for FMJH master scolarships.**
2020 –	**Co-chair of the "Probabilités" pole at CMAP.**
2019 –	**Elected member at the Academic Counsel of l'IP Paris.**
2019 –	**Member of the Gender and Professional Equality of CMAP (École polytechnique).**
2023	**Member of a national HCERES expert committee**, *Évaluation of the Institut Denis Poisson mathematics department (Orléans-Tours).*
2023	**Member of a selection committee for an Assistant Professor position (Orsay).**
2022	**Member of a selection committee (for part-time positions in the applied mathematics department at École polytechnique).**
2019	**Member of a selection committee for an Assistant Professor position (Orsay).**
2017	**Member of a selection committee for an Assistant Professor position (Applied mathematics department, École polytechnique).**
2012 – 2015	**Member of the board of Animath.**
2012 – 2014	**Designated member of the laboratory board (DMA, ENS Paris).**

Organization of scientific events

2011 –	**Co-organiser of the seminar Mathematic Park**, *Institut Henri Poincaré, Paris.* The seminar Mathematic Park is intended for students in their first years after high school graduation. Its aim is to present mini-courses in different mathematical fields.
2020	**Co-organizer of the conference "Journées ALEA 2020"**, *CIRM.*
2019	**Co-organizer of the conference "Journées de Probabilités 2019"**, *Dourdan.*
2018, 2019	**Co-organiser of the opening day of CMAP (one day meeting in the beginning of October).**
2018	**Organiser of the invited session "Graphes, réseaux et cartes aléatoires" at "journées MAS 2018"**, *Dijon.*
2014	**Member of the steering committee of the Night of Science**, *ENS Paris.*
2012	**Co-organiser of the 4th International Tournament of Young Mathematicians**, *3 – 10 July in Université Paris-Sud, France.*
2012	**Co-organiser of the second French Tournament of Young Mathematicians**, *14 – 16 April in École polytechnique, France.*
2011 – 2015	**Organiser of the Parimaths club.** Parimaths is a mathematics club intended for high school students who enjoy mathematics. Sessions are organized each Saturday afternoon at Ecole Normale Supérieure in Paris.

2012 – 2014 **Organiser of the informal probability seminar (DMA, ENS Paris)**.

Participation in collective research projects

2021 – 2026 **Project Research and Innovation Staff Exchange (RISE) "RandNet: Randomness and learning in networks"**, *PI: Marc Noy*.
2021 – 2025 **ANR IsOMa (Étude combinatoire du modèle d'Ising sur des cartes)**, *PI: Marie Albenque*.
2014 – 2019 **ANR GRAAL (Graphes et Arbres Aléatoires)**, *PI: Thomas Duquesne*.
2016 **Project PEPS intitulé "Probabilités sur les graphes"**, *PI*.
2013 – 2017 **Combinatoire à Paris**, *Project Émergences de la ville de Paris, PI: Guillaume Chapuy*.
2008 – 2012 **ANR A3 (Arbres Aléatoires et Applications)**, *PI: Jean-François Delmas*.

Jury duties

2023 – **Jury member of the Filière Universitaire Française (FUF) selection at École polytechnique**.
2024 **Jury member for the d'Alembert and Ferrand SMF prizes**.
2022 **Jury member of the SMF Junior competition**.
2022 – **Jury member of the B/L written exam in mathematics in ÉNS Paris (for students studying social and economic sciences)**.
2021 – **Jury member of the agrégation externe de mathématiques (competitive selection of mathematics teachers in higher education)**.
2023 **Jury member of the International Selection (ÉNS Paris)**.
2020 **Jury member of the oral exams of PC & PSI selection at École polytechnique**.
2019 **Jury member of the entrance exam in mathematics in ÉNS Paris (MPI contest, specific oral examination fors ENS Paris)**.
2015 – 2018 **Jury member of the entrance exam in mathematics in ÉNS Paris (for students studying social and economic sciences)**.

Language skills   French & Russian (mother tongues), English (fluent).