

BRUNE MASSOULIÉ

🌐 www.ceremade.dauphine.fr/~massoulie/

✉ [brune.massoulie \[at\] dauphine.eu](mailto:brune.massoulie[at]dauphine.eu)

EDUCATION

- PhD student - Université Paris-Dauphine** 2023 - 2026
Under the supervision of Cristina Toninelli and Clément Erignoux.
- M2 Mathématiques de l'aléatoire - Institut Polytechnique de Paris** 2022 - 2023
Master's degree in Probability and Statistics.
- Diplôme d'ingénieur de l'Ecole polytechnique - Ecole polytechnique** 2019 - 2023
Master's degree in Engineering and Science. General engineering curriculum with a specialisation in Applied Mathematics.
- Classe préparatoire scientifique - Lycée Hoche, Versailles** 2017-2019
Intense preparation for the Grandes Ecoles competitive exams; courses in mathematics, physics and computer science.
- Baccalauréat (Option Internationale du Baccalauréat, British version)** 2017
with high honours

PUBLICATIONS

- Q. Berger, B. Massoulié, *Wetting on a wall and wetting in a well: Overview of equilibrium properties*, Stochastic Process. Appl., Vol. 170 (2024), Special issue in tribute to Francis Comets, <https://doi.org/10.1016/j.spa.2024.104299>
- P. Carlotti, B. Massoulié, A. Morez, A. Villaret, L. Jing, T. Vrignaud, A. Pfister, *Respiratory pandemic and indoor aerodynamics of classrooms*, Building and Environment Vol. 212 (2022), <https://doi.org/10.1016/j.buildenv.2022.108756>.

TALKS

- Transience time of the facilitated exclusion process, *Young Researchers Seminar*, CEREMADE Oct. 2023

SKILLS

- Languages:** French (fluent, first language), English (fluent, first language), Spanish (B2 level), Russian (beginner level)
- Programming:** Julia, Python, C++, Java, OCaml
- Software & Tools:** LaTeX, Adobe Premiere Pro, Adobe Photoshop, Adobe Illustrator, Microsoft Office

WORK EXPERIENCE

- INRIA, Laboratoire Paul Painlevé, Villeneuve d'Ascq** April 2023 - August 2023
Research internship supervised by Clément Erignoux
Study of the transience time of the Facilitated Exclusion Process (FEP)
- Lycée Hoche, Versailles** September 2022 - June 2023
Mathematics examiner in Classes Préparatoires
Prepare and give weekly examinations in Mathematics to 1st and 2nd year students in Classes Préparatoires
- Laboratoire de probabilités, statistique et modélisation, Paris** April 2022 - August 2022
Research internship supervised by Quentin Berger - Rewarded with the "Félicitations" of Ecole polytechnique
Generalisation of a polymer wetting model, study of a phase transition in this model using the free energy
- Reverso, Neuilly-sur-Seine** June 2021 - August 2021
Junior data analyst. Study of a grammatical correction tool, analysis and improvement of a text corpus
- French National Gendarmerie, Villefranche-de-Rouergue** December 2019 - March 2020
Aspirant in the Groupe de Commandement. Training the new recruits, operational work