



# Louis Chataignier

Date of birth Dec 14, 1996

## Curriculum Vitae

Nationality French

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## Academic Background

- 2023– **PhD student** at *Institut de Mathématiques de Toulouse*. Supervisors: Pascal Maillard and Michel Pain. Thesis title: *Front fluctuations of branching Brownian motion*.
- 2022–2023 **Master in Advanced Mathematics** at *Université Lyon 1 – ENS de Lyon*, specializing in Probability and Statistics.  
M2 thesis: *Additive martingales of the branching Brownian motion*. Supervisors: Pascal Maillard and Michel Pain.
- 2022 **Agrégation of Mathematics**, option Probability and Statistics. Admitted 24<sup>th</sup> in the national ranking.
- 2021–2022 **Master in General Mathematics** at *Université Lyon 1*.  
M2 thesis: *Ordinary differential equations: examples of resolution and study of solutions in dimension 1 and 2*. Supervisor: Élise Fouassier.
- 2017–2018 **M1 in General Mathematics** at *Université Lyon 1*.  
M1 thesis: *Formal study of the solvability of systems of partial differential equations*. Supervisor: Philippe Malbos.
- 2014–2017 **Bachelor's degree in General Mathematics** at *Université Lyon 1*.
- 2014 **Scientific Baccalauréat** at *Lycée du Forez*, Feurs.

## Publications

- Jul, 2024 *Asymptotics of the overlap distribution of branching Brownian motion at high temperature*, with Michel Pain, 2024. arXiv:2407.21014. Preprint.

## Conferences and Seminars

- Jan, 2025 **Annual conference of the GDR Branchement** at Orsay: attendance.
- Sep, 2024 **Non-local branching processes** at *Centre International de Rencontres Mathématiques*, Marseille: attendance and presentation of a 10-minute talk.
- Jul, 2024 **Summer school of Saint-Flour** at *Ancien grand séminaire de Saint-Flour*: attendance and presentation of a 40-minute talk.

- Feb, 2024 **Spring school “Multiplicative chaos and cascades”** at Darmstadt (DE): attendance and presentation of a 10-minute talk.
- Jan 24, 2024 **Probability PhD students’ day** at *Institut de Mathématiques de Toulouse*: attendance and presentation of a 15-minute talk.
- Dec 21, 2023 **Christmas student seminar** at *Institut de Mathématiques de Toulouse*: attendance and presentation of a 15-minute talk.
- Nov, 2023 **1st conference of GDR Branchement** at *Institut de Mathématiques de Toulouse*: attendance.

## Science Communication

- Apr, 2022 **Management of the MathαLyon exhibition** at *Collège Marcel Pagnol*, Pierre-Bénite, with Régis Goiffon and Denis Serre.

## Teaching

- 2024–2025 At *Université Toulouse III - Paul Sabatier*:  
  - Introduction to probability theory, L2, TD/TP (46h).
  - Measure theory, L3, TD (28h).

- 2023–2024 At *Université Toulouse III - Paul Sabatier*:  
  - Introduction to probability theory, L2, TD/TP (46h).
  - Introduction to statistics, L2, lecture/TD (18h).

- 2022–2023 Weekly oral exams in preparatory classes at *Lycée du Parc*, Lyon.

- 2020–2021 Tutoring at *GoStudent*, Lyon.

## Organizing Responsibilities

- 2025 **Co-organizer of a reading group** for the probability team of *Institut de Mathématiques de Toulouse*.
- 2024– **Representative of PhD students and postdocs** on the laboratory council at *Institut de Mathématiques de Toulouse*.
- 2024 **Organizer of a reading group** for PhD students and postdocs in probability theory at *Institut de Mathématiques de Toulouse*.

## Other Professional Experience

- 2019–2020 Kitchen porter at *SmokeWorks*, Cambridge (UK).
- 2018–2019 Kitchen porter at *Palégrié* ★, Corrençon-en-Vercors.

## Skills

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|-------------|--|
| Languages   | French (native), English (C2)                      |
| Programming | L <sup>A</sup> T <sub>E</sub> X, Python, Matlab, R |
| Driving     | French driver’s license                            |