

Alexandre Lecestre

Resume

EDUCATION

- 2019–Present **PhD in Mathematics and Applications**, *University of Luxembourg*.
Supervisor: Yannick Baraud
Subject: Robust estimation in finite mixture models and hidden Markov models.
- 2019 **Diplôme de l'École Normale Supérieure de Lyon**.
- 2018 **Master of Science in Mathematics**.
M2 Mathématiques de l'aléatoire - finalité "Probabilités et Statistiques".
Université Paris-Saclay, France.
- 2016 **Bachelor of Science in Mathematics**.
Université Claude Bernard Lyon 1, France.
- 2015–2019 **Student at École Normale Supérieure de Lyon**.
Mathematics department.
- 2013–2015 **Classes Préparatoires aux Grandes Écoles**.
Lycée Chateaubriand, Rennes, France.
- 2013 **Baccalauréat Scientifique**.
Lycée Montesquieu, Le Mans, France.

ACADEMIC EXPERIENCE

- From 02/2021 **PhD Representative**.
to 01/2023 I was one of the three PhD representatives that are in charge, among other things, of the organization of the PhD Away Days (see below).
- From 03/2019 **Projet Long de Recherche 2**, *Laboratoire de Mathématiques d'Avignon*.
to 07/2019 Supervisor: Edith Gabriel.
Object of Study: Estimation of the conditional intensity of a point process.
- From 10/2018 **Projet Long de Recherche 1**, *Laboratoire J.A. Dieudonné de Nice*.
to 02/2019 Supervisor: Yannick Baraud.
Object of Study: ρ -estimation in a dependent framework.
- From 04/2018 **Master thesis**, *UMR MISTEA - INRA Montpellier*.
to 07/2018 Supervisor: Nicolas Verzelen.
Object of study: Statistical analysis of inventory data.

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🌐 alexandre-lecestre.github.io/alexandre-lecestre/

From 05/2017 **12 Week Internship**, *Lancaster University*.
to 07/2017 Supervisor: Paul Fearnhead.
Object of Study: Quasi-stationary distributions.

From 05/2016 **6 Week Internship**, *Institut de Mathématiques de Toulouse*.
to 06/2016 Supervisor: Jean-Michel Loubes.
Object of Study: A convergence theorem with the Wasserstein metric.

PUBLICATIONS AND PREPRINTS

- Robust estimation in finite mixture models, A. Lecestre, arXiv:2107.00587 (2021). submitted to ESAIM

EVENTS ATTENDED

- 07/2022 **3-Day Meeting of Statisticians in Paris**, *Institut Henri Poincaré, Paris*.
- 07/2021 **International Conference on Statistics and Related Fields**, *Belval, Luxembourg (online)*.
- 10/2020 **Workshop on Data Science**, *Belval, Luxembourg*.
- 09/2019 **StatMathAppli**, *Fréjus, France*.

PRESENTATIONS

- 08–09/2022 **PhD Away Days – BiLux 2022**, *Milan, Italy*.
Talk: "Introduction to statistical hypothesis testing".
- 08–09/2022 **StatMathAppli**, *Fréjus, France*.
Talk: "Robust estimation in finite state space hidden Markov models".
- 06/2022 **IMS Annual Meeting**, *London, UK*.
Talk: "Robust estimation in finite state space hidden Markov models".
- 06/2022 **ISNPS2022**, *Paphos, Cyprus*.
Talk: "Robust estimation in finite state space hidden Markov models".
- 03/2022 **Statistics team seminar**, *LMO, Orsay, France*.
Talk: "Robust estimation in hidden Markov models".
- 06/2021 **MHC2021 (Mixtures, Hidden Markov Models and Clustering)**, *Orsay, France (online)*.
Poster: "Robust estimation in finite Mixture models".
- 10/2020 **SanDAL Winter School on Mathematical Statistics**, *Belval, Luxembourg (online)*.
Talk: "Robust Estimation in Finite Mixture Models".
- 10/2021 **PhD Away Days**, *Strasbourg, France*.
Talk: "Central Limit Theorems".

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- 03/2021 **PhD Seminar**, *Belval, Luxembourg (online)*.
Talk: Introduction to Robust Statistics
- 10/2020 **PhD “Away” Days**, *Belval, Luxembourg (online)*.
Talk: “Test Theory”.
- 10/2019 **PhD Away Days**, *Bordeaux, France*.
Talk: “Maximum Likelihood Estimation”.

TEACHING EXPERIENCE

- 2022–2023 **Teaching Assistant**.
Structures mathématiques (1st semester of the BSc in mathematics).
- 2021–2022 **Teaching Assistant**.
Analysis 1 (1st semester of the BSc in mathematics).
- 2020–2021 **Teaching Assistant**.
Analysis 1 (1st semester of the BSc in mathematics).
- 2019–2020 **Teaching Assistant**.
Analysis 2 (2nd semester of the BSc in mathematics).
- 2019–2020 **Tutoring**.
I took part in the “Math Forge” program of the University of Luxembourg during the winter semester.
- 2015–2016 **Volunteer Tutoring**.
I assisted a freshman in mathematics.

SKILLS

Languages

- French Mother Tongue.
- English Fluent (Grade C at the Cambridge Advanced Exam, equivalent to level C1).
- Spanish Level B2.

Computer

- \LaTeX Production of scientific documents and presentations.
- R General knowledge including the creation of a package for a master machine learning course.