

Guillaume Maillard

https://www.math.u-psud.fr/~gmaillard/index_en.html

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Studies

- 2020–present **Postdoc supervised by Yannick Baraud**, *University of Luxembourg*
- 2017–2020 **Phd supervised by Sylvain Arlot and Matthieu Lerasle**, *LMO*, Orsay
Title of the thesis: Aggregated hold-out.
- 2013–2017 **Ecole Normale Supérieure**, Paris
- 2016–2017 **Research internship supervised by Sylvain Arlot and Matthieu Lerasle**, *LMO*, Orsay
- 2015–2016 **M2, Probability and Statistics**, *Université Paris-Sud*, Orsay, Master (mention Très Bien)
Students can choose either probability or statistics (my case).
- 2014–2015 **M1 in Mathematics**, *ENS, UPMC*, Paris
- 2013–2014 **L3 (Bachelor) in Mathematics**, *ENS, UPMC*, Paris
- 2011–2013 **Classes Préparatoires aux Grandes Ecoles**, *Lycée Henri IV*, Paris, MP*, MPI

Research

Phd thesis

- [4] Guillaume Maillard. “Hold-out and Aggregated hold-out”. Theses. Université Paris-Saclay, Sept. 2020. URL: <https://tel.archives-ouvertes.fr/tel-02971403>.

Published articles

- [3] Guillaume Maillard. “Aggregated hold out for sparse linear regression with a robust loss function”. In: *Electronic Journal of Statistics* 16.1 (2022), pp. 935–997. DOI: 10.1214/21-EJS1952. URL: <https://doi.org/10.1214/21-EJS1952>.
- [6] Guillaume Maillard, Sylvain Arlot, and Matthieu Lerasle. “Aggregated Hold-Out”. In: *Journal of Machine Learning Research* 22.20 (2021), pp. 1–55. URL: <http://jmlr.org/papers/v22/19-624.html>.

Preprints

- [1] Y. Baraud, H. Halconruy, and G. Maillard. “Robust density estimation with the L_1 -loss. Applications to the estimation of a density on the line satisfying a shape constraint”. 2022. DOI: 10.48550/ARXIV.2205.10524. URL: <https://arxiv.org/abs/2205.10524>.

- [2] Guillaume Maillard. "A MODEL-BASED APPROACH TO DENSITY ESTIMATION IN SUP-NORM". working paper or preprint. June 2022. URL: <https://hal.archives-ouvertes.fr/hal-03695981>.
- [5] Guillaume Maillard. "Local asymptotics of cross-validation in least-squares density estimation". working paper or preprint. June 2021. URL: <https://hal.archives-ouvertes.fr/hal-03263396>.

Conferences and Talks

- August 2022 **Statistiques Mathématiques et Applications**, Fréjus, France
- July 2022 **Three-Day Meeting of statisticians in Paris**, Paris, France
- Decembre 2021 **Forum des Jeunes Mathématiciens**, Besançon, France
- Mai 2021 **Team seminar**, Nice, France
- April 2021 **Séminaire Parisien de Statistiques**, Paris, France
- February 2020 **Team seminar**, Esch-sur-Alzette, Luxembourg
- Septembre 2019 **Statistiques Mathématiques et Applications**, Fréjus, France
- July 2019 **Team seminar**, MODAL, INRIA, Lille, France
- June 2019 **Journées de Statistiques 2019**, Nancy, France
- Decembre 2018 **CMStatistics 2018(ERCIM 2018)**, Pisa, Italy

Teaching

- 2022,2023 **Course "Resampling and Model selection"**, *University of Luxembourg*, Esch-sur-Alzette
Master MADS
- 2021–2022 **Reading group (on convex optimization)**, *University of Luxembourg*, Esch-sur-Alzette, Luxembourg
BASl semestre 5
- 19-23 July 2021 **Data Science Summer School**, *University of Luxembourg*, SANDAL, Esch-sur-Alzette, Luxembourg
- 2020 – 2021 **TA**, *University of Luxembourg*, Esch-sur-Alzette, Luxembourg
BASl semestre 4: Probabilités
- 2019 – 2020 **TA**, *Université Paris Sud*, Orsay, France
 - L3 MINT: Probability.
 - L2: Probability.
- 2018 – 2019 **TA**, *Université Paris Sud*, Orsay, France
 - L3 MINT: Statistics.
 - L2: Probability.

Administrative work

- 18-20 July 2022 **Three-Day Meeting of statisticians in Paris, IHP, Paris**, Organizer
- 2021–2022 **Probability and Statistics team seminar**, *University of Luxembourg*, Organizer
- 12-16 Juillet 2021 **ICON STARF conference**, *University of Luxembourg, SANDAL*, Organizer, Chairman
- 13-14 Octobre 2020 **Workshop on Data Science**, *University of Luxembourg, SANDAL*, Organizer, Chairman

Computer skills

\LaTeX **Good level**

R **Programming**

Implementing algorithms involving loops, linear algebra and indexing features. Creating graphics with plot, points and lines commands.

C **Some knowledge**

Writing short C functions in an R script using Rcpp.

OCaml **Programming**

Html,CSS **Some knowledge**

Coding my own webpage (from scratch).

Languages

French Mother tongue

English Bilingual (I passed the OEIB exam)

German Good level(C1)