Clément Berenfeld | CV

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Education

PhD. under the supervision of Prs. Marc Hoffmann and Jacques Féjoz, CEREMADE   **Paris**
Université Paris-Dauphine   *2019 – today*
Geometric inference and nonparametric statistics.

Master 2, Statistics and Machine Learning   **Orsay**
Université Paris-Sud, Highest honor   *2017–2018*
High-dimensional statistics, Statistical learning, Concentration inequalities, Graphical model, Machine learning theory, Non-parametric bayesian statistics, Sequential Learning, Topological data analysis.

First & second year at ENS Paris   **Paris**
ENS Paris, Highest Honor   *2014–2016*
Stochastic processes, Analysis of partial differential equation, Scale separation in fluid mecanics, Numerical modeling and simulation, Lie groups and Lie algebras, Amenable groups, Application of combinatoric methods to algebraic geometry.
Bachelor thesis : *Complex Multiplication Theory*, under the direction of Pr. J. Nekovar

Preparatory School   **Versailles**
Lycée Sainte-Geneviève, MPSI-MP*   *2012–2014*

Baccalauréat S   **Ussel**
Highest honor   *2012*

Experience

Master internship   **San Diego**
UCSD   *April 2018–August 2018*
Four month internship under the supervision of Pr. Ery Arias-Castro, on geodesic distance estimation and controlled-curvature random processes.

Research and development in data integration   **Bagneux**
Signactif   *March 2017–August 2017*
Six months work as data integration engineer for the start-up *Signactif*. The mission was supervised by Prs. Bertrand Maury and Sylvain Faure (*LMO, Université Paris-Sud*).

Oral examiner in mathematics   **Versailles**
Lycée Sainte-Geneviève, MPSI-PCSI   *2014–2016*

Articles

- *Estimating the Reach of a Manifold via its Convex Defect Function* (2019), with John Harvey, Marc Hoffmann and Krishnan Shankar. *In preparation*.
- *Density Estimation on an Unknown Submanifold* (2019), with Marc Hoffmann. *In revision*, arXiv:1910.08477.
- *Some Random Paths with Angle Constraints* (2018), with Ery Arias-Castro. *In revision*, arXiv:1811.01101.

Technical and Personal skills

- **Programming skills :** Python, R
- **Spoken languages :** French (mother tongue), English (fluent), German, Spanish (notions)

Interests

- Music, Cinema, Bouldering, Cycling, Travels