

Quentin Paris

+7 (968) 063 55 98

✉ qparis@hse.ru

🌐 www.qparis-math.com



Academic positions

- Since 2020 **Tenured Associate Professor**, *HSE University*, Faculty of Computer Science, Department of Data Analysis and Artificial Intelligence & HDI Laboratory.
Moscow, Russia
- 2017-2020 **Assistant Professor**, *HSE University*, Faculty of Computer Science, Department of Data Analysis and Artificial Intelligence & HDI Laboratory.
Moscow, Russia
- 2014-2017 **Assistant Professor**, *HSE University*, Faculty of Economics, Department of Statistics and Data Analysis & LSA Laboratory.
Moscow, Russia
- 2013-2014 **Postdoctoral Fellow**, *Center for Research in Economics and Statistics (CREST)*.
Paris, France

Education

- 2013 **Ph.D. in Statistics**, *ENS Cachan*, Thesis title: A Contribution to Complexity Reduction in Statistics.
France
- 2011 **Agrégation de Mathématiques**.
- 2010 **M.Sc. in Mathematics**, *ENS Cachan*.
France
- 2008 **B.Sc. in Mathematics**, *University of Paris 11*.
France

Research

Interests My interests are in Statistics and Learning Theory. Up to 2017, I worked on classification and regression problems in the context of complex or high-dimensional data. Since 2017, I focus on problems arising at the intersection of Learning, Geometry and Optimal Transport with a particular interest for online prediction algorithms in spaces with a non-euclidean geometry.

- Submitted papers **Online learning with exponential weights in metric spaces**, *Q. Paris*.
<https://arxiv.org/abs/2103.14389>
- Jensen's inequality in geodesic spaces with lower bounded curvature**, *Q. Paris*.
<https://arxiv.org/abs/2011.08597>
- Empirical Variance Minimization with Applications in Variance Reduction and Optimal Control**, *D. Belomestny, L. Iosipoi, Q. Paris and N. Zhivotovskiy*.
<https://arxiv.org/abs/1712.04667>
- The exponentially weighted average forecaster in geodesic spaces of non-positive curvature**, *Q. Paris*.
<https://arxiv.org/abs/2002.00852>
- Fast convergence of empirical barycenters in Alexandrov spaces and the Wasserstein space**, *T. Le Gouic, Q. Paris, P. Rigollet and A. Stromme*.
<https://arxiv.org/abs/1908.00828>
- Published papers **Convergence rates for empirical barycenters in metric spaces: curvature, convexity and extendible geodesics**, *A. Ahidar-Coutrix, T. Le Gouic and Q. Paris*.
Probability Theory and Related Fields, 2019
- On the occupancy problem for a regime switching model**, *M. Grabchak, M. Kelbert and Q. Paris*.
Journal of Applied Probability, 57(1):53-77, 2020
- A stability property of k -means clustering**, *T. Le Gouic and Q. Paris*.
Electronic Journal of Statistics, 12(2):4239-4263, 2018.
- On the prediction loss of the lasso in the partially labeled setting**, *P. Bellec, A. Dalalyan, E. Grappin and Q. Paris*.
Electronic Journal of Statistics, 12(2):3443-3472, 2018.
- On the exponentially weighted aggregate with the Laplace prior**, *A. Dalalyan, E. Grappin and Q. Paris*.
The Annals of Statistics, 46(5):2452-2478, 2018.
- Finite sample properties of the mean occupancy counts and probabilities**, *G. Decrouez, M. Grabchak and Q. Paris*.
Bernoulli, 24(3):1910-1941, 2018.
- Cox process functional learning**, *G. Biau, B. Cadre and Q. Paris*.
Statistical Inference for Stochastic Processes, 18:1-21, 2015.
- Minimax adaptive dimension reduction for regression**, *Q. Paris*.
Journal of Multivariate Analysis, 128:186-202, 2014.
- On Hölder fields clustering**, *B. Cadre and Q. Paris*.
Test, 21:301-316, 2012.

Reviewer for Annals of Statistics, Electronic Journal of Statistics, Bernoulli, Annales de l'Institut Henry Poincare, Journal of Statistical Planning and Inference, ESAIM Probability and Statistics, COLT, NeurIPS.

Research Institute for Mathematical Stochastics, Georg-August Universitat, visits Gottingen. Mini course on barycenters in the Wasserstein space. (November 24 to 31, 2019. Invited by Pr. Axel Munk)

IAS, Princeton (February 4 to 18, 2019. Collaboration with Pr. Philippe Rigollet)

Ecole Centrale Marseille (June 1 to June 30, 2016. Collaboration with Dr. Thibaut Le Gouic)

MIT (March 15 to May 15, 2016. Collaboration with Pr. Philippe Rigollet)

Ecole Centrale Marseille (May 30 to June 7, 2015. Collaboration with Dr. Thibaut Le Gouic)

CREST (April 4 to April 19, 2015. Collaboration with Pr. Arnak Dalalyan)

Recent teaching

Since 2019 **Advanced Probability**, *M.Sc. program Data Science*, HSE University, Faculty of Computer Science, Lectures and seminars.
Moscow, Russia

Since 2017 **High Dimensional Statistics**, *M.Sc. program Statistical Learning Theory*, Faculty of Computer Science at HSE, Lectures and seminars.
Moscow, Russia

Statistical Learning Theory, *M.Sc. program Data Science*, Faculty of Computer Science at HSE, Lectures and seminars.
Moscow, Russia

2018-2019 **Introduction to functional analysis**, *Yandex School of Data Analysis*, Lectures.
Moscow, Russia

Miscellaneous

Citizenship French. Born on February 18, 1986, in London UK.

Status Married. One child.

Languages French (native), English, Russian