

Maximilien Dreveton

Current position

2018–2022 **PhD student in Computer Science**, *Inria Sophia-Antipolis*, Nice, France.
Graph clustering in networks with non-binary pairwise interactions

Publications

- 2021 **Recovering Communities in Temporal Networks Using Persistent Edges**, *Konstantin Avrachenkov, Maximilien Dreveton, Lasse Leskelä*, International Conference on Computational Data and Social Networks, 243-254, **best paper – runner up award**.
- 2021 **Higher-Order Spectral Clustering for Geometric Graphs**, *Konstantin Avrachenkov, Andrei Bobo, Maximilien Dreveton*, Journal of Fourier Analysis and Applications, 27(2), 1-29.
- 2019 **Almost Exact Recovery in Label Spreading**, *Konstantin Avrachenkov, Maximilien Dreveton*, International Workshop on Algorithms and Models for the Web-Graph, 30-43.
- 2019 **Leçons pour l'agrégation de mathématiques - Préparation à l'oral**, *Maximilien Dreveton, Joachim Lhabouz*, Ellipses, ISBN : 9782340030183.

Preprints

- 2020 **Estimation of Static Community Memberships from Temporal Network Data**, *Konstantin Avrachenkov, Maximilien Dreveton, Lasse Leskelä*, arXiv : 2008.04790.
- 2020 **Almost exact recovery in noisy semi-supervised learning**, *Konstantin Avrachenkov, Maximilien Dreveton*, arXiv : 2007.14717.

Experience

- 2019–2021 **Co-teaching : Statistical Analysis of Random Graphs**, *MSc Data Science & AI*, University Nice - Côte d'Azur, France.
- 2016–2018 **High school Mathematic teacher**, Grenoble & Annecy, France.
- April–August **Master Internship**, *International Center for Quantum Materials*, Beijing, China.
- 2015 Master thesis : Spin pumping into Topological Insulators (Weyl semimetals) and 2D electron gas.

Education background

- 2015–2016 **Agrégation de Mathématiques**, rank : 52.
University Toulouse Paul Sabatier, Toulouse. Option A : Probability and Statistics.
(Agrégation is the highest degree of teaching certification in France, Master level).
- 2013–2015 **Master**, *Ecole Normale Supérieure*, Lyon.
Master in Statistical and Computational Physics, with a semester at *La Sapienza Università*, Roma (Italy) and a semester at *Vrije Universiteit*, Amsterdam (Netherlands).
- 2012–2013 **Bachelor**, *Ecole Normale Supérieure*, Lyon, Bachelor in Physics..

Skills & Languages

- French : mother tongue English : fluent Mandarin : basic
- Coding : Python (*scikit-learn*, *networkx*), SQL (basic).
- Maths : Statistics, probability theory, statistical network analysis (graph clustering, graph signal processing), machine learning. (semi-supervised learning)
- eMathster : Developed an Android app (in 2017 using Java), called eMathster, targeting french high school students who want to learn mathematics.