

Guillaume Braun

PhD Candidate

Education

- 2020–2022 **Applied Mathematics and Computer Science Thesis**, PhD, Inria Lille - Nord Europe-MODAL team, France
Topic : « Efficient iterative methods for clustering and matching problems on graphs »
Supervisors : Christophe Biernacki, Hemant Tyagi.
- 2015–2017 **Civil servant student at Ensai**, National School for Statistics and Information Analysis, Rennes, France.
- 2014–2015 **Master's Degree in Functional Analysis**, Université de Franche-Comté, Besançon, France, *first class honors.*
- 2012 « **Agrégation de mathématiques** », French competitive exam to qualify High School teachers in Mathematics.
- 2010–2011 **Master's Degree in Math Education**, Université de Strasbourg, France.

Professional Experience

- Since 2015 **Insee statistician Attaché (civil servant statistician).**
- 2011–2015 **High-school Teacher.**

Publications and preprints

- 2022 **Minimax Optimal Clustering of Bipartite Graphs with a Generalized Power Method**, G. Braun, H. Tyagi, Preprint.
- 2022 **Seeded graph matching for the correlated Wigner model via the projected power method**, E. Araya, G. Braun, H. Tyagi, Preprint.
- 2021 **An iterative clustering algorithm for the Contextual Stochastic Block Model with optimality guarantees**, G. Braun, H. Tyagi, C. Biernacki, ICML 2022.
- 2020 **Clustering on multilayer graphs with missing values**, G. Braun, H. Tyagi, C. Biernacki, AISTATS 2021.

Talks

- 2021 **An iterative clustering algorithm for the Contextual Stochastic Block Model with optimality guarantees**, MODAL seminar (online).
- 2021 **Clustering graphs with side information**, SPSR Workshop - Bucharest (online).
- 2020 **Clustering on multilayer graphs with missing values**, MODAL seminar (online).

Skills

Computer Science Programming skills in **R**, **Python**, **SQL**

Languages French (native), English (fluent, TOEIC 925), Japanese (fluent, JLPT N1)