GASPARD ABEL

18 rue du Pressoir, 75020 Paris, FRANCE,
gaspard.abel@ens-paris-saclay.fr

CURRENT POSITION

Ecole Normale Supérieure de Paris-Saclay, Gif-sur-Yvette   *Sept. 2023 - Now*
PhD student in Mathematics at Interfaces at the Centre Borelli.
Supervision: Julien Randon-Furling, Jean-Pierre Nadal, Argyris Kalogeratos
Hadamard Mathematics Doctoral School (EDMH)
Structural and semantic analysis of information flows in social networks
networks: modeling its underlying mechanisms and its influence on public opinion

ACADEMIC BACKGROUND

Ecole Normale Supérieure de Paris-Saclay, Gif-sur-Yvette   *Sept. 2019 - Sep. 2023*
Physics of complex Systems M2, Sorbonne, Université Paris-Cité,
Université Paris-Saclay. Courses included: advanced statistical physics,
stochastic processes, out-of-equilibrium physics, machine learning...

François-René de Chateaubriand high school, Rennes   *Sept. 2017 - Sept. 2019*
Intensive program preparing for the National competitive exams
for entry to top schools in Mathematics and Physics

Alain-René Lesage high school, Vannes   *Sept. 2014 - Sept. 2017*
High school diploma in Science with the highest honors

SKILLS

Computer Science	Python, LaTeX, Matlab
Software & Tools	OpenMole (ABM exploration software)
Language	English : C2 Spanish : B1 Italian : A2

SCIENTIFIC PRODUCTION

Uncovering social network activity using joint user and topic interaction,   *Jan. 2026*
Gaspard Abel, Argyris Kalogeratos, Jean-Pierre Nadal, Julien Randon-Furling
Accepted in *IEEE Transactions on Computational Social Systems*

Reducing Recurrent Competitive Epidemics via Dynamic Resource Allocation   *Dec. 2025*
Argyris Kalogeratos, Gaspard Abel, Stefano Sarao Mannelli
Submitted in *IEEE Transactions on Network Science and Engineering*

MultiLayerNetViz : A Multi-Layered Visualization Module for Information   *Nov. 2025*
Diffusion in Social Networks. Python module for multi-layered networked data.

(available on Github)

TALKS

frCSS 2025 French Local Chapter - Conference on Complex Systems/Sunbelt *Apr. 2024*

CSS 2025 International Conference on Complex Systems, Siena *Sept. 2025*

ARCOM international day for Social Media research *Nov. 2025*
(French Authority for the Regulation of Communication in Media)

TEACHING EXPERIENCE

Descriptive and Inferential Statistics
1st year of Cycle Pluridisciplinaire en Enseignement Supérieur (CPES), *2024-2026*
Paris-Saclay University. Creation of the syllabus, teaching courses,
exercise sessions and exams. Total: 192 hours of teaching.

INTERNSHIP SUPERVISION

Mahdi HADJ-TAIEB, M1 ENSTA student *June - Aug. 2025*
Sequential learning for Temporal Point Process models
Mohamed BENLOUGHMARI, M1 ENSTA student *Oct. - Dec. 2025*
Density-based sequential learning for Temporal Point Processes

ACADEMIC EXPERIENCE

Internship at the SPEC-SPHYNX of the Commissariat
à l'énergie Atomique et aux énergies alternatives *April - July 2021*
Reconstruction of the pressure field near singular events in a
turbulent flow. Development of a pressure reconstruction algorithm
on Lagrangian trajectories obtained from velocity measurements in a
Von Kármán swirling flow, supervised by A. Cheminet.

Internship at the Gatsby Computational
Neuroscience Unit, University College London *Feb. - July 2022*
Modeling correlated information cascades in social media with
multivariate Hawkes processes, supervised by Stefano Sarao Mannelli.

Master's thesis internship at the Centre d'Analyse et de
Mathématique Sociales, EHESS *April - July 2023*
Master's thesis on information diffusion in social networks in
preparation of the PhD project, supervised by Jean-Pierre Nadal.