

Armand Gissler

Curriculum Vitae

Inria Paris
48 rue Barrault, 75013 Paris, France
✉ firstname.lastname@inria.fr
🌐 agissler.github.io

Work Experience

Research

- Feb. 2025 – **Post-doctoral Fellow at SIERRA team**, Inria Paris, Supervisor: Francis Bach
(currently) Analysis of sampling algorithms
- Oct. 2021 – **PhD in Applied Mathematics**, Inria & CMAP, École polytechnique, Supervisors: Anne
Dec. 2024 Auger and Nikolaus Hansen
Convergence analysis of Evolution Strategies with Covariance Matrix Adaptation (CMA-ES)
- Oct. 2020 – **Pre-doctoral Research Internship**, McGill University, Montreal, Supervisor: Tim Hoheisel
June 2021 A note on the K-epigraph.
- April – Aug. **Research Internship (M2)**, Inria Saclay - CMAP, École Polytechnique, Supervisor: Anne
2020 Auger
Line search and learning rate influence on Evolution Strategies convergence.
- April – Aug. **Research Internship (M1)**, University of Edinburgh, Supervisor: Lukasz Szpruch
2019 Mean-field stochastic control and optimization.
- Feb. – June **Research Initiation Internship (L3)**, CMLA, ENS Cachan, Supervisor: Alain Durmus
2018 Study of non-reversible MCMC methods.

Teaching

- 2021–2024 Teaching assistant, Bachelor of Science, École polytechnique – LAB 102: How to write mathematics (3 years)
- 2017–2018 Oral examiner, Lycée Michelet
- 2017–2018 Tutor, Institut Villebon-Charpak

Awards

- 2025 **PhD Award**, Gaspard Monge Program for Optimization, Operations Research and their Interactions with Data Science (PGMO), Palaiseau, France
- 2025 **Dissertation Award – Honorable mention**, SIGEVO, Málaga, Spain

Education

- 2019 – 2020 **Master's Degree (M2) in Mathematics, Vision, Learning (MVA)**, ENS Paris-Saclay
- 2017 – 2021 **Master's Degree (M1) in Mathematics and Applications**, ENS Paris-Saclay / Université Paris-Saclay / École polytechnique
- 2017 – 2018 **Bachelor's Degree (L3) in Mathematics**, ENS Paris-Saclay

Laboratory Life

- 2022–2024 Co-organizer, CMAP & CMLS PhD Seminar
- 2022–2024 Member, CMAP Laboratory Life Commission

Scientific Publications

Preprints

- Sept. 2024 *Irreducibility of nonsmooth state-space models with an application to CMA-ES*
Armand Gissler et al.
<https://hal.science/hal-04713675/>
- Feb. 2024 *On the irreducibility and convergence of a class of nonsmooth nonlinear state-space models on manifolds*
Armand Gissler et al.
<https://arxiv.org/pdf/2402.06447.pdf>

Journal Articles

- Apr. 2024 *Asymptotic estimations of a perturbed symmetric eigenproblem*, Applied Mathematics Letters
<https://inria.hal.science/hal-04386103v1/document>
- Sept. 2023 *A note on the K-epigraph*, Optimization
<https://arxiv.org/pdf/2107.00117.pdf>
- Oct. 2021 *Scaling-invariant functions versus positively homogeneous functions*, JOTA
<https://arxiv.org/abs/2101.03755>
Conference Proceedings
- July 2023 *Evaluation of the impact of various modifications to CMA-ES that facilitate its theoretical analysis*, GECCO 2023
https://hal.science/hal-04089923/file/evaluation2023author_version.pdf
- July 2022 *Learning Rate Adaptation by Line Search in Evolution Strategies with Recombination*, GECCO 2022
<https://inria.hal.science/hal-03644404/document>

Communications

- Nov. 2024 SIERRA Seminar, Inria, Paris
- July 2024 International Symposium of Mathematical Programming (ISMP), Montréal, Canada
- June 2024 Theory of Randomized Optimization Heuristics, Dagstuhl, Germany
- March 2024 CMAP PhD Students Seminar, Palaiseau, France
- Oct. 2023 Young Probabilists and Statisticians (JPS) Colloquium, Oléron, France
- Sept. 2023 Applied Mathematics Young Researchers Congress (CJC-MA), Gif-sur-Yvette, France
- July 2023 BBOB Workshop, GECCO'23, Lisbon, Portugal
- June 2023 SIAM Conference on Optimization (SIAM OP23), Seattle, United States
- July 2022 GECCO'22, Boston, United States
- Feb. 2022 Theory of Randomized Optimization Heuristics, Dagstuhl, Germany