# MARIUS POTFER

Paris, France | marius.potfer@ensae.fr | Google Scholar | Website

I am currently a PhD student in FAIRPlay (ENSAE & Inria joint team), under the supervision of Prof Vianney Perchet. I mainly work on online learning, auction and game theory, and applications to markets with an emphasis on electricity and energy markets.

## PUBLICATIONS

**Comparing Uniform Price and Discriminatory Multi-Unit Auctions through Regret Minimization**, Potfer, M., Perchet, V. NeurIPS 2025
Available at: https://arxiv.org/abs/2510.19591

**Improved Learning Rates in Multi-Unit Uniform Price Auctions**, Potfer, M., Baudry, D., Richard H. Perchet, V., Wan, C., Gruet, P. NeurIPS 2024
Available at: https://arxiv.org/abs/2501.10181

## PREPRINTS

**Instance dependent Stochastic Lipschitz Bandits,** Potfer, M., Perchet, V. (2026).
Available at: http://arxiv.org/abs/2605.29748

**Learning to Bid in FCR Markets: A Best-of-Both-Worlds Approach,** Potfer, M., Cheng W., Gruet P. (2026).
Available at: http://arxiv.org/abs/2605.29748

## CONFERENCE PRESENTATIONS

Poster Presentation | NeurIPS in Paris 2025 | Paris, France
Poster Presentation | Workshop 'From Matching to Market: A Tale of Mathematics, Economics and Computer Science' | Cargèse, France | 2025
**Oral Presentation** | PGMO Days | Fall 2024
Poster Presentation | NeurIPS in Paris 2024

## AWARDS

Funding from SMAI projects BOUM for collaborative research | Fall 2025
Best Reviewer for Neurips 2025 | Fall 2025

## TEACHING EXPERIENCE

**Teaching Assistant | ENSAE Paris**
- Programming in Python (L3 level) – 2023 - 2026: Responsible for practical sessions, supervision, and guidance of undergraduate students.
- Advanced Optimization (M2 level) – 2024: Led problem sessions and provided support for graduate-level optimization coursework.

## RESEARCH EXPERIENCE & EDUCATION

**PhD Researcher | ENSAE Paris & EDF R&D | 2023–Present**
Focus: Auction mechanisms in electricity reserve markets, learning in repeated games, and strategic interactions under uncertainty.
Supervisors: Prof. Vianney Perchet (ENSAE), Dr. Cheng Wan (EDF R&D), Dr. Pierre Gruet (EDF R&D)

**Master in Energy Science and Technology | 2021–2023 | ETH Zurich**
Major: Energy Science and Energy Economics | Minor: Optimisation and Energy Markets.
Master Thesis | CIRED| 2022–2023
Studied and modelled the material and carbon footprint of the French economy using Input-Output modelling.

**Research Intern | Matcha Wine | 2020**
Developed NLP-based models for wine recommendation systems and explored startup-level R&D challenges in applied AI.

**Diplôme d'Ingénieur (Applied Mathematics) | 2018–2021 | École Polytechnique**

**Classe Préparatoire | 2016–2018 | Lycées Louis-le-Grand and Henri IV**

**Baccalauréat Scientifique (High School Diploma) | 2016 | Lycée Saint-Michel de Picpus**

## REFERENCES

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Researcher, EDF R&D
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