

Victor ISSA

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About Me I am a first year PhD student at ENS de Lyon under the supervision of Jean-Christophe Mourrat. I am interested in problems related to spin glasses and partial differential equations.

Education

- 2019-2022 **École Normale Supérieure de Lyon**, Obtained a Master's degree in Probability and Statistics. Grade : 17,2/20
- 2021-2022 **EM Lyon Business School**, Followed a semester worth of courses on the topic of mathematical finance and portfolio management in the context of an exchange program. Grade : 17,1/20
- 2017-2019 **Lycée Michelet**, Classe Préparatoire MPSI-MP.

Research Experience

- Winter 2023 **University of Waterloo**, Research internship under the supervision of Aukosh Jagannath. Duration : 4 months.
- Fall 2022 **University of Toronto**, Obtained results in the direction of a proof of Parisi's formula using Hamilton-Jacobi equations. Performed bibliographic research on the Sherrington-Kirkpatrick model and multi-species spin glass models under the supervision of Dmitry Panchenko. Duration : 5 months.
- Summer 2022 **École Normale Supérieure de Lyon**, Proved a uniqueness results for a class of weak solutions for the Hamilton-Jacobi equation. Learned viscosity solution theory for the Hamilton-Jacobi equations. Researched uniqueness properties of weak solutions of the Hamilton-Jacobi equation under the supervision of Jean-Christophe Mourrat. Duration : 5 months.
- Summer 2021 **King's College**, Performed bibliographic research on elliptic curves, complex multiplication and L functions under the supervision of Ne-tan Dogra. Duration : 3 months.

Summer 2020 **Université Paris-Saclay**, Performed bibliographic research on L functions and Artin's conjecture under the supervision of Gaetan Chenevier. Duration : 6 weeks.

Research Articles

Uniqueness of weak solutions for the Hamilton-Jacobi equation. Prépublication.

Teaching Activities

Spring 2024 **Probability Exercise Sessions** Coordinated the exercise sessions of the master course "stochastic processes" given by Emmanuel Jacob.

September 2023 **Master Research Project Defense**, Evaluated short talks given by first year master students after a 3 months research project.

Projects

December 2019 **Goutelas Seminar**, Delivered a talk on Riemann's Zeta function and the distribution of prime numbers.

Spring 2020 **Reading Group**, Gave two and attended ten talks on quadratic forms and Diophantine geometry under the supervision of Greg McShane as part of a reading and study group.

Winter 2021 **Informal Science Education**, Wrote an article aimed at high-school students on pythagorean triples for "Images des Mathématiques" in collaboration with William Sarem.

2020-2022 **Journal Mathématiques de l'École**, Collaborated with several other students to administer and publish the Mathematical Journal of Students of ENS de Lyon.

Personal Skills

Languages French (native), English (C2)

Programming L^AT_EX, Python, Excel, R