ASHOT ALEKSIAN

Institut Camille Jordan UMR 5208
Université Jean Monnet - Saint-Etienne
ashot.aleksian@univ-st-etienne.fr

☑ LANGUAGES

Russian – native, English – C1, French – B1

☑ RESEARCH INTERESTS

McKean-Vlasov process, Self-interacting diffusions, Exit-problem, Freidlin-Wentzell theory, Large Deviations Theory, Stochastic Differential Equations, Stochastic Processes, Probability theory

☑ PROFESSIONAL EXPERIENCE

2020—present: PhD student at Université Jean Monnet, Saint-Etienne

2018—2020: Analyst at Glowbyte Consulting, Moscow

2017—2018: Professor's Assistant, Higher School of Economics, Moscow

2017—2019: M.S. "Statistical Modeling and Actuarial Science", Faculty of Economic Sciences, Higher School of Economics, Moscow

2013—2017: B.S. "Applied Informatics", Department of Applied Mathematics, Higher School of Economics, Moscow

☑ PAPERS

[1] Ashot Aleksian, Pierre Del Moral, Aline Kurtzmann, and Julian Tugaut. Self-interacting diffusions: long-time behaviour and exit-problem in the convex case, 2023 [to appear in ESAIM: PS] ArXiv: https://arxiv.org/abs/2303.14997

[2] Ashot Aleksian, Aline Kurtzmann, and Julian Tugaut. Exit-problem for a class of non-Markov processes with path dependency, 2023 [Preprint.] ArXiv: https://arxiv.org/abs/2306.08706

[3] Ashot Aleksian, Samuel Herrmann, and Julian Tugaut. Measure-dependent non-linear diffusions with superlinear drifts: existence, large deviations principle and asymptotic behavior of the first exit-times. [work in progress]

☑ PRESENTATIONS

06/2023: "Stochastic processes, metastability and applications", Nancy

10/2022: "First Franco-Japanese workshop on chemotaxis models (macroscopic and microscopic viewpoints)", Sendai, Japan

05/2022: "Metastability, mean-field particle systems and nonlinear processes", Saint-Étienne

☑ RELEVANT SKILLS

Programming languages: Python, R, C++

Database: SQL, Apache Hadoop, Spark, Hive, Database design

☑ AWARDS

2017: HSE Olympiad for Students and Graduates, 2nd place. Specialization: Mathematical Methods in Economics

☑ STUDENT PAPERS

2019: Recent applications of Optimal Mass Transportation — Master's Thesis

2018: Mathematical Modeling of Self-Organizing Multi Agent Systems — Term Paper

2017: Ring Laser Quality Control Subsystem Development — Bachelor's Thesis

2016: Analysis of Fundamental Results in Optimal Control of Dynamic Economic System Problems Derived Using Maximum Principle — Term Paper