Giulia Pucci

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EDUCATION

KTH - Royal Institute of Technology **09 2022 – current**
PhD Student - Department of Mathematics - Division of Mathematical Statistics. *Stockholm, Sweden*

- Supervisor: Associate Professor Nacira Agram
- Teaching Assistant for courses in *Financial Mathematics* and *Linear Regression Analysis.*

Sapienza University of Rome **09 2020 – 07 2022**
Master of Science - Final Grade : ***110/110 with honors*** *Rome, Italy*

- Thesis in Control Theory: "Optimal strategies for a debt management problem." Supervisor: Prof. Graziano Crasta

Sapienza University of Rome **09 2017 – 07 2020**
Bachelor of Science - Final Grade : ***110/110 with honors*** *Rome, Italy*

- Thesis: "Calculus of Variations: an application to the protein structure." Supervisor: Prof. Annalisa Malusa
- **Erasmus exchange program** at Stockholm University during the first semester of the academic year 2019-2020

PUBLICATIONS

* Agram N., Pucci G., & Øksendal B. (2024) **Impulse Control of Conditional McKean-Vlasov Jump Diffusions** Journal of Optimization Theory and Applications, 1 − 31

PREPRINTS

* Gozzi, F., Leoocata, M., & Pucci, G., **Network-Based Optimal Control of Pollution Growth** arXiv preprint

RESEARCH VISITS

University of Oslo **06 2023**
Research visit to collaborate with Prof. Bernt Øksendal and Prof. Fred Benth *Oslo, Norway*
Luiss Guido Carli **08 2023 - 12 2023**
One-semester project collaborating with Prof. Fausto Gozzi and Marta Leocata. *Rome, Italy*

TALKS

* LUWSNA Linnaeus University **Workshop** on S(P)DEs, their numerics and applications in Växjö, Sweden 23/12/06-08
* Algerian **Conference** on Stochastic Analysis with Applications to Finance, Energy and Insurance, 24/03/06
* Insurance Data Science **Conference**, Stockholm University, 24/06/17-18

POSTER PRESENTATIONS

* European **Summer School** in Financial Mathematics "Mathematics of FinTech" - TU Delft, Netherlands 23/09/04-08
* Machine Learning and Optimal Control **Summer School**, Gaeta, Italy 24/05/27-31

ATTENDANCE

* **Conference** in memory of Tomas Björk - Swedish House of Finance, Stockholm, Sweden 22/10/10-11.
* Linnaeus-Maghreb **Workshop** in Stochastic Analysis - Linnaeus University, Växjö, Sweden 22/11/16.
* **Workshop** on Stochastic Control Theory, KTH, Stockholm 23/10/25-26
* **Workshop** "Mean Field Games in Economics 2023" - Luiss University, Rome Italy 23/11/09-10
* Some Mathematical Approaches to Climate Change and its Impacts **Conference**, Pisa, Italy 24/04/22-23

TEACHING AND SUPERVISION

Teaching Assistant
SF2701 Financial Mathematics, Basic Course 7.5 credits, KTH — *P4 2023, P4 2024*

Master's Thesis Supervision
SF291X Degree Project in Financial Mathematics, Second Cycle (60528) — *Spring 2024*

Teaching Assistant
SF2930 Regression Analysis 7.5 credits, KTH — *P3 2024*

Bachelor Thesis Supervision
SF100X Degree Project in Applied Mathematics (Regression Analysis) — *Spring 2023*

RELEVANT COURSEWORK

- Control Theory
- Stochastic Processes
- ML and Neural Networks
- Mathematical Finance
- Stochastic Calculus
- Numerical Modeling
- Pollution Control

PROGRAMMING SKILLS

- Python
- C
- Matlab
- Julia
- Wolfram Mathematica
- R