Memory effects in stochastic models arising in economics

Research Assistant Internship
in the Department of Economics and Finance

1. Tutor

- Prof. Giovanni Alessandro Zanco, gzanco@luiss.it

2. Skills and Experience required

- Languages: English
- Skills required:
    - Courses: "Mathematical Methods" and "Probability"
    - Math Software (e.g. Matlab/Mathcad/Octave/Mathematica)
    - Statistics, econometrics
    - Statistical software (e.g. R/STATA/etc)
    - Knowledge on how to find and get data from main data sources
    - Ability/Availability to acquire basic knowledge in SDEs/Stochastic Processes/PDEs.

3. Job description: "Memory effects in stochastic models arising in economics"

The project aims at understanding whether considering memory effects can lead to better modelling of time-dependent phenomena in economics. A possible application is the analysis of income dynamics and the extension of previous models related to it.
The intern will be involved in the review of the literature, possibly in writing the new model and simulating it and in comparing the prediction given by the model with available data.