COLLOQUIUM
DE MATEMÁTICA

IST DEPARTAMENTO DE MATEMÁTICA

TÉCNICO LISBOA

From randomness to determinism

Patrícia Gonçalves, IST

In this seminar I will describe how to derive rigorously the laws that rule the space-time evolution of the conserved quantities of a certain stochastic process. The goal is to describe the connection between the macroscopic equations and the microscopic system of random particles. The former can be either PDEs or stochastic PDEs depending on whether one is looking at the law of large numbers or the central limit theorem scaling; while the latter is a collection of particles that move randomly. Depending on the choice of the transition probability that particles obey, we will see that the macroscopic laws can be of different nature.

14 February, 16:00 - 17:00
Instituto Superior Técnico, Campus Alameda
Complexo Interdisciplinar
Anfiteatro Abreu Faro

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