THE WEIZMANN INSTITUTE OF SCIENCE

FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Geometric Functional Analysis and Probability Seminar

,Ziskind Building
on Thursday, May 05, 2016
at 11:00

Double feature room 155

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Lyon

One-dependent walks in hypergeometric-Dirichlet environments

Abstract:

Dirichlet environments are one of the few examples in Random Walk in Random Environment in which some non-trivial random walk properties are fully and explicitly characterized in terms of the parameters. A key feature of the model is the so-called 'time reversal property', saying that inverting the time is resulting in the same class of models, with an explicit change of parameters. In this talk, which is based on a joint work in process with Christophe Sabot, I'll present a generalization of random walks in Dirichlet environments using hypergeometric functions having that nice feature, and discuss the question of existence of an invariant probability measure for the process on the environments from the point of view of the walker which is absolutely continuous with respect to the initial measure.