

FIM

Minicourse

Scott N. Armstrong (CNRS / Université Paris-Dauphine)

Quantitative stochastic homogenization of Hamilton-Jacobi equations

May 8 - 29, 2013

Wednesday, May 08, 10:00 - 12:00

Wednesday, May 22, 10:00 - 12:00

Wednesday, May 29, 10:00 - 12:00

HG G 19.1, ETH Zürich, Rämistrasse 101

Abstract

We will consider the stochastic homogenization of first-order and viscous Hamilton-Jacobi equations. These are the master equations which describe (in the first order case) continuum analogues of first-passage percolation and (in the viscous case) large deviations of diffusions in heterogeneous environments. In the main part of the course, we will review a new homogenization procedure which leads to quantitative results.

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