

INTERNATIONAL RESEARCH TRAINING GROUP

Stochastic Models of Complex Processes

Wednesday, February 9, 2011 – 16:15

Speaker

Michele Salvi (Technische Universität Berlin)

Title

A large deviation principle for a RWRC in a box

Abstract: After a review of the basics of Large Deviations Theory, the model of *Random Walk among Random Conductances* (RWRC) on \mathbb{Z}^d is introduced. The process is driven by a randomly perturbed Laplace operator depending on i.i.d. conductances on the bonds, which we assume to be positive, but possibly arbitrarily small. We formulate an annealed large deviation statement for the normalized local times of the RWRC forced to stay in a finite box and give heuristics for its proof.

Joint work (in progress) with Wolfgang König and Tilman Wolff.

Location: MA 041, Straße des 17. Juni 136, TU Berlin

<http://www2.math.tu-berlin.de/smcp/>