Séminaire de Probabilités et Statistique

Mardi 21 mai à 14h00
Laboratoire Dieudonné
Salle de conférences - LJAD

Xinxin Chen

ICJ, Université de Lyon 1

Edge local times of randomly biased random walks on trees in the diffusive/sub-diffusive case

We consider a recurrent random walk on trees for which the environment is given by a branching random walk. In the diffusive or sub-diffusive case, by studying the edge local times up to the n-th return to the root, we obtain, under the annealed and quenched probability, the asymptotical behaviours of the largest edge local time and that of the number of edges visited at least n^{θ} times, as well as the effective conductance of the corresponding electrical network.