Séminaire de Probabilités et Statistiques

Mardi 23 janvier à 14h00

Laboratoire Dieudonné

Salle de Conférences

Davide Gabrielli

(Univ. dell'Aquila)

Level 2.5 Large Deviations for Continuous Time Markov Chains with Periodic Rates

We consider an irreducible continuous time Markov chain on a finite state space and with time periodic jump rates and prove the joint large deviations principle for the empirical measure and flow and the joint large deviations principle for the empirical measure and current. By contraction we get the large deviation principle of three types of entropy production flow. We derive some Gallavotti-Cohen type symmetries and discuss some applications.

Joint work with L. Bertini, R. Chetrite, A. Faggionato