Talk 3: Antoine Mouzard (Université Paris Nanterre)

Title: Invariant measure and ergodicity in random environment

Abstract. Invariant measures play a crucial role in understanding the long-term behavior of dynamical systems, as they describe the statistical equilibrium of the system. In this talk, I will present a Langevin dynamic in infinite dimensions and random environment, driven by the continuous Anderson Hamiltonian. After a brief description of the construction of such an operator in one and two dimensions on a finite box, I will present a study of the long time behavior of the dynamic, for which we prove exponential convergence to a unique invariant measure using a Doeblin criterion. Joint work with H. Eulry.