

Limit theorems for quantum trajectories

jeudi 14 mars 2024 16:30 (1 heure)

Quantum trajectories are Markov chains modeling the evolution of a quantum system under repeated indirect measurements. The goal of this talk is to show how to prove limit theorems for these Markov chains. In particular, we show that the Markov operator associated to the Markov chain has a spectral gap, and we show that there exists an analytic perturbation of this operator. Then, by applying the theory of perturbation, we deduce limit theorems for the empirical mean and the Lyapunov exponent.

It is a joint work with T. Benoist and C. Pellegrini. [arXiv:2402.03879]

Orateur: HAUTECEUR, Arnaud (Toulouse 3 University)