

## PROBABILITY SEMINAR

## Large deviations for a non-markovian particle system

Guilherme Reis

Universidade Federal da Bahia

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ZOOM link

<https://us02web.zoom.us/j/86343893713?pwd=QjE3SFhrUjVCY3FYU01UUHJEYWl0Zz09>

**Abstract.** In this talk we will discuss the stochastic Kuramoto model with delays. This is a fruitful model for neuronal networks and there are several interesting questions about it. In the talk we are interested in the behaviour of a typical particle of this particle system, which can be described through a path-dependent McKean-Vlasov PDE. More precisely, we employ decoupling techniques to derive large deviations and law of large numbers for the system with a characterization of the limit. The talk is based in a work in collaboration with Rangel Baldasso (Leiden University) and Alan Pereira (UFAL).