## 27th Rencontres ITZYKSON: Fluctuations far from Equilibrium



Contribution ID: 5 Type: **not specified** 

## Thierry BODINEAU- Large deviations for out of equilibrium correlations in the symmetric simple exclusion process

Thursday, June 1, 2023 9:30 AM (45 minutes)

For finite size Markov chains, the Donsker-Varadhan theory fully describes the large deviations of the time averaged empirical measure. In this talk, we consider the large size asymptotics of the Donsker-Varadhan functional associated with the one-dimensional symmetric simple exclusion process connected with reservoirs at different densities. The Donsker-Varadhan functional encodes a variety of scales depending on the observable of interest. We will focus on the time-averaged two point correlations and investigate the probability of observing atypical two point correlations for a long time.

Joint work with B. Dagallier

**Presenter:** BODINEAU, Thierry (IHES)