

A Large Deviation Principle for the Equilibrium States on Markov Shifts: The Zero Temperature Case

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Abstract:

We prove a Large Deviation Principle when the temperature goes to zero for the family of Gibbs measures associated to locally Holder potentials in countable Markov shifts with the BIP property. This result extends a previous theorem by Baraviera, Lopes and Thioullien for compact shifts to the noncompact setting. Jointly with Rodrigo Bissacot (IME-USP, Brazil) and Jairo K. Mengue (UFRGS, Brazil).