SCALING LIMIT OF METASTABLE RANDOM PROCESSES

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The metastable random processes exhibit tunneling behavior if there are multiple metastable valleys with the same depth. Tunneling behavior is heuristically described by a Markov chain, but its rigorous formulation is technically cumbersome. We explain recent developments in this sort of problems based on two classic models: the condensing zero-range processes and the small random perturbation of dynamical systems. Even these classic models, the result are very new. This presentation is based on a joint work with Fraydoun Rezakhanlou.