Scaling limit of the hopping times dynamics for the GREM on a fine tuning regime

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Resumo/Abstract:

We consider the hopping times dynamics for the 2-level GREM in the N dimensional hypercube, and show that under a *fine tuning* choice of volume-energy-temperature parameters and at an appropriate time scale it converges to a 2-level K process as $N \to \infty$. This is a low temperature regime on which both levels of the model are close to their individual equilibria, and outside of which one ought to see a different behavior. (Joint project with V. Gayrard.)