

EXPONENTIAL TRANSITION TIME FOR THE METASTABLE ISING MODEL

A. GAUDILLIÈRE

ABSTRACT. We show that the two-dimensional kinetic Ising model at subcritical temperature and in the limit of a vanishing magnetic field exhibits an asymptotic exponential time for its transition time to equilibrium when started from its metastable state in a box the size of which is of the same order as that of the critical Wulff droplet. This is done by describing the metastable state as a “soft” measure that interpolates between the “hard” quasi-stationary measure and the restricted ensemble, and by controlling the associated soft capacity.

This is a joint work with Alessandra Bianchi, Paolo Milanesi and Maria-Eullia Vares.