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On equilibrium distribution of a reversible growth model

Anatoli Iambartsev - IME/USP, Brazil

We study a finite Markov chain describing a set of interacting integer-valued finite spins indexed by sites of a finite subset of d-dimensional lattice. Conditions of time reversibility are examined. It is shown that the equilibrium distribution in the time reversible case converges to a limit distribution as the indexing set expands to the whole lattice. The occupied site percolation problem is solved for the limit distribution. Some related models are also discussed.

This the joint work with V.Shcherbakov (Durham University, Moscow State University)