

Simulation of 1-Dimensional Ising Model

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The Ising Model is Mathematical expression of the ferro-magnetism is statistical mechanics.

This system of spins is immersed in a heat bath of constant temperature T and in an external magnetic field h . Its dynamics are governed by the Hamiltonian,

$$H(s) = -J \sum_{\langle x,y \rangle} s_x s_y - h \sum_x s_x \quad (1)$$