

Abstract Submitted
for the DAMOP18 Meeting of
The American Physical Society

Nonequilibrium properties of the driven-dissipative Ising model

ANDREW KOLLER, Michigan State University, ANZI HU, JAMES CLARK, American University, DANIEL PAZ, MOHAMMAD MAGHREBI, Michigan State University — We study numerically the dynamics and steady state properties of a transverse-field Ising model coupled to a dissipative bath. In certain parameter regimes the non-equilibrium quantum system can be mapped to a classical Ising model at an effective temperature determined by the transverse field and the dissipation. We also discuss if, and how, the dynamics can be effectively described by a stochastic spin model.

Andrew Koller
Michigan State University

Date submitted: 26 Jan 2018

Electronic form version 1.4