Abstract Submitted
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Nonequilibrium relaxation and critical aging for driven Ising lattice gases[1] GEORGE DAQUILA, UWE C. TAUBER, Department of Physics, Virginia Tech — We employ Monte Carlo simulations to study the non-equilibrium relaxation of driven Ising lattice gases in two dimensions. Whereas the temporal scaling of the density auto-correlation function in the non-equilibrium steady state does not allow a precise measurement of the critical exponents, these can be accurately determined from the aging scaling of the two-time auto-correlations and the order parameter evolution following a quench to the critical point. We obtain excellent agreement with renormalization group predictions based on the standard Langevin representation of driven Ising lattice gases, valid to all orders in the dimensional expansion.

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