

# Universal aspects of Ising droplets

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Within the Ising lattice gas model a large-scale Monte Carlo study of equilibrium droplets is discussed and compared with analytical predictions. Emphasis is placed on universal aspects of the condensation/evaporation transition in two dimensions. To this end extensive simulations for square lattices with nearest-neighbour (NN) and next-nearest-neighbour (NNN) interactions as well as for NN triangular lattices are compared with each other and confronted with the theory, which a priori is applicable only for asymptotically large NN square lattices. By using exact values when available or carefully determined numerical estimates for a few system parameters (magnetization, susceptibility, Wulff interface free energy), we indeed find for all three systems a characteristic, universal behaviour at the condensation/evaporation transition when suitably scaled variables are employed.

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