

Abstract Submitted  
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**Decay of metastable states in the N-neighbor Ising model** RANJIT CHACKO, HARVEY GOULD, Clark University, W. KLEIN, Boston University — We study the decay of metastable states in the N-neighbor Ising model in which each spin equally interacts with all other spins. Previous work has shown that near the pseudospinodal in an Ising model with long-range interactions nucleation occurs when many clusters which span a correlation volume coalesce to form the nucleating droplet. By observing the decay of a metastable state in the N-neighbor Ising model we can study the effect of the pseudospinodal on nucleation in a model which does not possess a length scale. This study has implications for spin-crossover materials.

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