THE WORM PROCESS FOR THE ISING MODEL IS RAPIDLY MIXING

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We consider the *worm* process for the zero-field ferromagnetic Ising model, introduced by Prokofiev and Svistunov. We prove the process is rapidly mixing on all finite graphs and at all temperatures. As a corollary, we construct fully-polynomial randomized approximation schemes for the Ising susceptibility and two-point correlation function.