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Trial wave function for the quantum Ising model at zero temperature JULIO F. FERNÁNDEZ, Universidad de Zaragoza, Spain — A trial wavefunction for the ground state of the transverse field Ising model is proposed. It is a product of pair wavefunctions, which is exact for up to three spins, and is amenable to Monte Carlo calculations. We study the phase transition that occurs at zero temperature as the transverse field varies. Results for the Ising ferromagnet and some spin-glass models will be given.

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