Abstract Submitted
for the MAR06 Meeting of
The American Physical Society

Finite-temperature density matrix renormalization using an enlarged Hilbert space ADRIAN E. FEIGUIN, Microsoft Research, STEVEN R. WHITE, University of California, Irvine — We apply a generalization of the time-dependent DMRG to study finite temperature properties of several quantum spin chains, including the frustrated $J_1 - J_2$ model. We discuss several practical issues with the method, including use of quantum numbers and finite size effects. We compare with transfer-matrix DMRG, finding that both methods produce excellent results.

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Date submitted: 29 Nov 2005 Electronic form version 1.4