

Abstract Submitted
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Renormalized Multicanonical Sampling in Two-Dimensional Systems YONG HWAN LEE, DAVID YEVICK, Univ of Waterloo — This presentation considers the relative speed and accuracy of the recently introduced renormalized multicanonical sampling method [D. Yevick, Int. J. Mod. Phys. C, 1650033] in the context of the 2 dimensional Ising model. In particular, the technique is compared to a method in which the transition matrix is constructed during a multicanonical determination of the density of states. In the comparison, the simulation speed is significantly increased by the renormalized sampling and the calculations with the transition matrices obtained from the multicanonical refinement steps of the renormalized algorithm improves the simulation speed and accuracy further.

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