Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

Spin-Liquid Behavior of a Simple Spin Model on the Triangular Lattice[1] RIBHU KAUL, University of Kentucky — I will report on numerical studies of phase transition between competing magnetic (M) and valence bond solid states (VBS) using unbiased quantum Monte Carlo methods in sign-problem free models on non-bipartite lattices in two dimensions. On bipartite lattices the transition between these two phases is a direct second order critical point - consistent with various aspects of the "deconfined" criticality scenario. In contrast, on non-bipartite lattices an intermediate phase appears between M and VBS. We present evidence that this new phase is a quantum spin liquid.

[1]Supported in part by NSF DMR-1056536.

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Date submitted: 14 Nov 2014 Electronic form version 1.4