

Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Valence bond solid phases in the spin-1 XXZ model on the kagome lattice SERGEI ISAKOV, ETH Zurich, YONG BAEK KIM, University of Toronto
— We study the spin-1 XXZ model on the kagome lattice using quantum Monte Carlo simulations. We find a rich phase diagram including two different valence bond solids and other quantum paramagnetic phases. We also characterize the nature of quantum phase transitions between those phases. These results are compared with various effective field theory approaches.

Sergei Isakov
ETH Zurich

Date submitted: 27 Nov 2007

Electronic form version 1.4