

Abstract Submitted  
for the MAR07 Meeting of  
The American Physical Society

**Theory of spin liquid on the kagome lattice and application to  $\text{ZnCu}_3(\text{OH})_6\text{Cl}_2$  : Quantum field theory**<sup>1</sup> MICHAEL HERMELE, YING RAN, PATRICK A. LEE, XIAO-GANG WEN, MIT — We study the properties of an algebraic spin liquid on the kagome lattice, which is suggested by projected wavefunction calculations to be the ground state. Various quantities of relevance to  $\text{ZnCu}_3(\text{OH})_6\text{Cl}_2$  will be discussed, including specific heat, magnetic susceptibility and spin correlations. The role of magnetic impurities in this spin liquid state and the implications for experiments will also be discussed.

<sup>1</sup>This research is supported by NSF grant Nos. DMR-0433632 and DMR-0517222.

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Date submitted: 29 Nov 2006

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