

Abstract Submitted
for the MAR07 Meeting of
The American Physical Society

Field-induced anisotropy crossover in copper pyrazine perchlorate $\text{Cu}(\text{pz})_2(\text{ClO}_4)_2$ FAN XIAO, CHRISTOPHER LANDEE, MARK TURNBULL, Clark University — The temperature-dependent magnetization of a single crystal of the 2D QHAF copper pyrazine perchlorate was studied at different fields along all three crystalline orientations. The crystal has identical response when the applied field lies within the layer, only showing a low temperature minimum for fields larger than 3 kOe. The temperature of the minimum increases smoothly with the field strength. The effect is explained as a field-induced 2D Heisenberg to 2D XY anisotropy crossover [1].

[1] A. Cuccoli et al, Phys. Rev. B **68**, 060402 (2003).

Christopher Landee
Clark University

Date submitted: 22 Nov 2006

Electronic form version 1.4