Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

Spin fluctuations in the Kondo Semimetal CeRu4Sn6[1] WESLEY FUHRMAN, IQM, Johns Hopkins University, J. HAENEL, A. PROKOFIEV, S. PASCHEN, Vienna University of Technology, D.T. ADROJA, ISIS, J.A. RODRIGUEZ, NIST, C.L. BROHOLM, IQM, NIST, Johns Hopkins University — We present neutron scattering results for CeRu4Sn6. Tentatively classified as one of the few non-cubic Kondo insulators, CeRu4Sn6 has highly anisotropic physical properties. Using cold neutron inelastic neutron scattering, we have identified a magnetic signal for $\hbar\omega < 1$ meV with a $4f$ like form factor and Q-dependence that is indicative of anisotropic antiferromagnetic spin correlations.The implications for the classification and understanding of CeRu4Sn6 are discussed.

[1]The work at IQM was supported by the US Department of Energy, office of Basic Energy Sciences, Division of Material Sciences and Engineering under grant DE-FG02-08ER46544.

Wesley Fuhrman
IQM, Johns Hopkins University

Date submitted: 14 Nov 2014 Electronic form version 1.4