Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Anomalous Knight Shift properties in a variety of Superconductors BIANCA HALL, RICHARD KLEMM, University of Central Florida — Anomalous Knight shift properties have been found in a variety of superconductors below the superconducting transition temperature. In most instances this anomaly is an observed Knight shift along one axis but no observed Knight shift perpendicular to this axis (usually the c-axis). Materials that show this anomaly include LiFeAs, UPt3, CeTIn5 (T=Co and Ir), Tl2Ba2CuO6+y, and YBa2Cu3O7-δ. Another anomaly occurs in the material Na0.35CoO2·1.3H2O, where NMR data for the Knight shift done on 59Co and 23Na do not agree. Additionally, NMR data of FeSe show no shift, which is contrary to the material's s-wave pairing superconductivity. Finally, Sr2RuO4 has a constant Knight shift, which is contrary to upper critical field measurements and superconducting gap measurements.

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Date submitted: 05 Nov 2013 Electronic form version 1.4