Abstract Submitted
for the MAR05 Meeting of
The American Physical Society

Optical study of rival interactions in a d-electron ferromagnetic Kondo system ALEX SCHAFGANS, K.S. BURCH, N.P. BUTCH, M.B. MAPLE, University of California, San Diego, D. MANDRUS, Oak Ridge National Laboratory, D.N. BASOV, University of California, San Diego — We report on a combined optical, transport and thermodynamic study of the Zintl compound $Yb_{14}MnSb_{11}$, demonstrating that it is the first ferromagnetic Kondo lattice in the underscreened limit. We suggest a scenerio whereby the combination of Kondo and Jahn-Teller effects provides a consistent explanation of both transport and optical data.

Kenneth Burch
University of California, San Diego

Date submitted: 22 Nov 2004 Electronic form version 1.4