Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

Complex T-H phase diagram in Ce3TiSb5[1] D.E. JACKSON, T. STEVENSON[2], D. VANGENNEP, B. JONES, J.J. HAMLIN, University of Florida - Gainesville, Florida 32611 — We have carried out a detailed characterization of single crystals of the hexagonal compound Ce_3TiSb_5, via electrical resistivity, magnetization, and specific heat. These results are consistent with Kondo lattice behavior and an antiferromagnetic ordering temperature of 5.5 K. For magnetic fields applied along specific crystallographic orientations, metamagnetic transitions appear and are accompanied by a large negative magnetoresistance. As the temperature is progressively lowered, the metamagnetic transitions bifurcate.

[1]A Portion of this work was performed at the National High Magnetic Field Laboratory, which is supported by Nationa Science Foundation Cooperative Agreement No. DMR-1157490, the State of Florida, and the U.S. Department of Energy
[2]TS supported by UF REU program NSF DMR-1156737.

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Date submitted: 14 Nov 2014 Electronic form version 1.4