Abstract Submitted for the MAR05 Meeting of The American Physical Society

Field dependence of thermal conductivity in the superconducting state of M.A. TANATAR, University of Toronto, J. PAGLIONE, LOUIS TAILLE-FER, University of Sherrbrooke, C. PETROVIC, Brookhaven National Laboratory, P. CANFIELD, AMES Laboratories — The thermal conductivity of heavy-fermion superconductor CeCoIn5 reveals a notable hysteresis between up and down sweeps of magnetic field, observed at low temperatures, slightly below the upper critical field Hc2. We study systematically this effect as a function of temperature and magnetic history. A possible relation to a coexisting magnetic order is discussed.

M. A. Tanatar University of Toronto

Date submitted: 01 Dec 2004 Electronic form version 1.4