

Abstract Submitted  
for the MAR07 Meeting of  
The American Physical Society

**Kondo-holes in La-doped CeOs<sub>4</sub>Sb<sub>12</sub>**<sup>1</sup> COSTEL R. ROTUNDU, BOHDAN ANDRAKA, University of Florida — CeOs<sub>4</sub>Sb<sub>12</sub> is an example of an interesting class of systems with low carrier concentrations in which strongly electron correlated states develop at low temperatures. 2% of La introduced for Ce suppresses the 1.1 K ordering and leads to exotic heavy fermion behavior. Electrical resistivity of weakly La-doped alloys, studied down to 20 mK, is proportional to the square of temperature, but with the proportionality coefficient (A) being negative. Such a temperature variation is characteristic of Kondo-hole systems. The absolute value of A (-45  $\mu\Omega\text{cm}/\text{K}^2$  for Ce<sub>0.98</sub>La<sub>0.02</sub>Os<sub>4</sub>Sb<sub>12</sub>) implies presence of massive quasiparticles. Magnetic fields reduce the absolute value of A and, for sufficiently strong fields, lead to a Fermi-liquid temperature variation (positive A).

<sup>1</sup>Supported by the Department of Energy, grant No. DE-FG02-99ER45748

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Date submitted: 20 Nov 2006

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