

Abstract Submitted  
for the CAL11 Meeting of  
The American Physical Society

**Evidence of local distortions in the filled skutterudite compounds  $\text{LOs}_4\text{Sb}_{12}$  ( $\text{L} = \text{Nd}, \text{Pr}, \text{Eu}$ ) from EXAFS studies** TREVOR KEIBER, FRANK BRIDGES, UC Santa Cruz — We present a temperature dependent extended x-ray absorption fine structure (EXAFS) analysis on skutterudite compounds of the form  $\text{LOs}_4\text{Sb}_{12}$  for L the rare earth elements Nd, Pr, Eu. We find the L-Sb and Os-Sb peaks are well ordered while the X-Os and Os-Os peaks show anomalous behavior for X = Nd and Pr. We propose a distortion of the lattice structure to account for these changes.

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Date submitted: 30 Sep 2011

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