Abstract Submitted
for the MAR10 Meeting of
The American Physical Society

**Synthesis and Properties of CaCuAs and $CaCu_2As_2$** FENG CHEN, BING LV, YUYI XUE, C.W. CHU[1], Dept. of Physics and Texas Center for Superconductivity, University of Houston, Houston, TX 77204-5002 — Motivated by the recent studies on iron pnictides, we synthesized CaCuAs and $CaCu_2As_2$. Single crystals of CaCuAs were also grown successfully. The resistivity, magnetic susceptibility and thermoelectric power were measured and SDW- like anomalies were observed and compared. The thermopower for both CaCuAs and $CaCu_2As_2$ are positive from room temperature down to 10 K, indicating holes as the majority carrier. We will report doping studies and discuss the possiblities to induce superconductivity in this system.

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Date submitted: 20 Nov 2009 Electronic form version 1.4