Abstract Submitted
for the DNP15 Meeting of
The American Physical Society

New prospects for characterizing the asymmetry dependence of the nuclear caloric curve ALAN MCINTOSH, SHERRY YENNELLO, Texas A&M University — My recent measurements have demonstrated a dependence of the caloric curve on the neutron-proton asymmetry. If confirmed, this represents a new feature of the nuclear equation of state. These results were made possible by the complete isotopic reconstruction of excited quasi-projectiles produced in heavy ion collisions. I will discuss the isotopic reconstruction and multiple probes of the the temperature, which are the strengths of this measurement. I have conducted a new independent experiment to further study the asymmetry dependence of the caloric curve through fusion reactions. The new experiment and the status of the analysis will be discussed.

Alan McIntosh
Texas A&M University

Date submitted: 01 Jul 2015 Electronic form version 1.4