

Cyclotron Colloquium, Tuesday April 2nd, 2013, at 3:45 pm

Room MIST 102 at the Mitchell Institute

Refreshment will be served at 3:30 pm

The Asymmetry Dependence of the Nuclear Caloric Curve

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Abstract:

The nuclear caloric curve is a fundamental facet of the nuclear equation of state. By studying isotopically reconstructed sources produced in intermediate-energy heavy-ion collisions, we report for the first time a clear dependence of the caloric curve on the neutron-proton asymmetry. Temperatures are extracted with chemical and kinetic methods, with multiple probes for each method. For all probes of the temperature, the temperature is observed to decrease linearly as asymmetry increases.