Abstract Submitted
for the HAW05 Meeting of
The American Physical Society

Isospin (N/Z) dependence of isotopic yield ratios as a function of fragment kinetic energy CARL SCHRECK, SHERRY YENNELLO, BRIAN STEIN, SARAH SOISSON, Cyclotron Institute, Texas A&M University — Assessing the effect of isospin (N/Z) on nuclear fragmentation is important in understanding the symmetry energy contribution to nuclear reactions. Previous studies have observed that the fragment excitation energy spectra for isotopes with smaller isospin (more neutron deficient isotopes) are significantly more energetic. We present data which utilizes isobaric beams of N/Z>1 (^{20}F), N/Z=1 (^{20}Ne), and N/Z<1 (^{20}Na) to determine the effect of the beam isospin on projectile fragmentation. Beams were obtained at the MARS (Momentum Achromat Recoil Separator) facility at the Texas A&M Cyclotron Institute with ^{20}F+Au, ^{20}Ne+Au, and ^{20}Na+Au reactions at 32Mev/A. Fragments were then detected with the FAUST detector (Forward Array Using Silicon Technology), allowing for isotopic identification of charged particles to Z = 6, thus enabling complete reconstruction of the quasi-particle in both charge and mass for peripheral reactions in which there are small numbers of nucleons transferred. For each fragment produced in these reactions, center of mass fragment energy spectra are produced. These Isotopic energy spectra will be presented as a function of the isospin of the beam.

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Date submitted: 27 Jun 2005 Electronic form version 1.4