Abstract Submitted for the DNP08 Meeting of The American Physical Society

Isotopic width distributions and symmetry energy SARA WUEN-SCHEL, STRATOS GALANOPOULOS, KRIS HAGEL, ZACH KOHLEY, DINESH SHETTY, SARAH SOISSON, GEORGE SOULIOTIS, BRIAN STEIN, SHERRY YENNELLO, Texas A&M University Cyclotron Institute — Within the Microcanonical Multifragmentation Model (MMM), the bulk versus surface contribution to the symmetry energy is predicted to be distinguishable. If the symmetry energy is dominated by the surface, the symmetry energy coefficient should evolve with the size of the fragment studied. However, if the bulk term dominates, the symmetry energy coefficient should be constant across all fragment sizes. Symmetry energy can be accessed through knowledge of the parameter α . This parameter may be obtained by isoscaling [1] or isotopic widths [2]. Differentiation between bulk and surface requires isotopic widths across a wide array of elements. Projectile fragmentation of 86 Kr+ 64 Ni at 35MeV/u was taken on the NIMROD-ISiS detector. The wide range of isotopic resolution seen in NIMROD-ISiS data allows the isotopic widths for Z=3-15 to be extracted for this study. Events are characterized through reconstruction of the quasi-projectile. Isotopic width data will be presented.

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