

Abstract Submitted
for the DNP08 Meeting of
The American Physical Society

N/Z Equilibration in Peripheral Reactions on the FAUST Array BRIAN STEIN, S.N. SOISSON, G.A. SOULIOTIS, D.V. SHETTY, S. GALANOPOULOS, Cyclotron Institute, Texas A&M University, A.L. KEKSIS, Los Alamos National Laboratory, S. WUENSCHHEL, Z. KOHLEY, L. MAY, S.J. YENNELLO, Cyclotron Institute, Texas A&M University — In recent years, nucleon transport in peripheral heavy ion collisions has been proposed as a probe of the density dependence of the nuclear symmetry energy. Recently a high statistics data set was taken of the systems $^{32,36}\text{S} + ^{112,124}\text{Sn}$ at 45 MeV/A using the FAUST array. Quasi-projectiles have been reconstructed from isotopically resolved fragments (with mass identification up to $Z=14$) to be used as a probe of the N/Z equilibration. Initial results show that quasi-projectiles are produced with a wide range of N/Z for each reaction system. Also, the quasi-projectile distributions show sensitivity to the N/Z of both the projectile and target used. Experimental results will be presented with comparisons to theoretical models.

Brian Stein
Cyclotron Institute, Texas A&M University

Date submitted: 02 Jul 2008

Electronic form version 1.4