Abstract Submitted
for the DNP16 Meeting of
The American Physical Society

Neutron multiplicity distributions for neutron-rich projectile fragments at the NSCL[1] MARIA MAZZA, PETER CHRIST, SHARON STEPHENSON, Gettysburg College, MONA COLLABORATION — Projectile fragmentation is one of the mechanisms used at nuclear science facilities around the world for the production of rare isotope beams. The study of the projectile fragmentation mechanism informs beam simulation codes, but relatively few studies of the fragmentation process have been done, especially at intermediate energies. The MoNA Collaboration used an 86 MeV/u ^{32}Mg beam on a natural beryllium target at the National Superconducting Cyclotron Laboratory to produce neutron multiplicities distributions in coincidence with charged fragments for isotopes ranging from ^{29}Na to ^{20}F. Particle identification for the isotopes from fluorine, neon, and sodium will be presented, as well as preliminary neutron multiplicities distributions.

[1]Supported by NSF grants 1203357, 1613429 and HHMI grant 52007540.

Sharon Stephenson
Gettysburg College

Date submitted: 27 Jul 2016 Electronic form version 1.4