

Abstract Submitted  
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**Measurement of Excitation Energy of Neon Prefragments** M. MOSBY, D.J. MORRISSEY, M. THOENNESSEN, NSCL/MSU, MONA COLLABORATION — Projectile fragmentation forms the basis for beam production at radioactive beam facilities such as the National Superconducting Cyclotron Laboratory (NSCL), yet uncertainties remain about the specifics of the production mechanism. For example, very little is known about the excitation energy of the precursors of the observed final fragments. In the present work, neon isotopes produced in the fragmentation of a  $^{32}\text{Mg}$  beam at 86 MeV/nucleon on a Beryllium target, ranging in mass loss from  $\Delta A = 3-10$ , were observed and the coincident neutrons were detected using the Modular Neutron Array (MoNA). A strong correlation between the neutron multiplicities and fragmentation mass loss was observed, and the variation compares well to that from a statistical evaporation model.

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