Abstract Submitted
for the DNP17 Meeting of
The American Physical Society

Production of Radioactive Beams on the Proton Dripline Using MARS at Texas A&M[1] REBEKAH ROUNDEY, Hillsdale College, BRIAN ROEDER, MICHAEL YOUNGS, Cyclotron Institute, Texas A&M University — Exotic nuclei near the proton dripline are of interest for research in nuclear astrophysics, especially in the study of the r-p process. A ^{58}Ni on Ni reaction at higher energies has been shown to successfully populate isotopes on the dripline, but this reaction has not previously been used at the Cyclotron Institute. In this experiment, a ^{58}Ni beam at 36MeV/u was impinged on Nickel and Beryllium targets to determine which isotopes could be produced. The resulting fragments were measured with two Silicon detectors in order to determine energy loss and production rates for each isotope. The effects of the different targets and the presence of a Carbon stripper foil on production rates will be presented and compared with simulations from the LISE++ program.

[1]Funded by a NSF REU grant (PHY - 1659847) and a DOE grant (DE-FG02-93ER40773)

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Date submitted: 27 Jul 2017 Electronic form version 1.4