

Abstract Submitted
for the TS4CF08 Meeting of
The American Physical Society

Testing of a charged particle spectrometer for a proton/deuteron beam facility DAVID MCKENNA, JOHN ELLSWORTH, LAWRENCE B. REES, Brigham Young University — BYU's Laboratory Nuclear Astrophysics Research Group (LNAR) is constructing a proton/deuteron beam facility to study fusion of bound reactants. Incorporated in this facility is a charged particle spectrometer utilizing a two dimensional, multi-channel analyzer capable of detecting 150k events per second. This spectrometer consists of a student built target chamber with a silicon charged particle detector telescope, LabView software, a NIDAQ card, standard NIM BIN amplifiers, and a custom designed interface. We report the testing of the spectrometer using scattered 2.1 MeV protons and 5.47 MeV alpha particles.

David McKenna
Brigham Young University

Date submitted: 18 Sep 2008

Electronic form version 1.4