

Abstract Submitted  
for the DNP16 Meeting of  
The American Physical Society

**Testing of a Micro-channel Plate Detector for Improved TwinSol Measurement**<sup>1</sup> RICKY LEBLANC, Louisiana State University, J. T. ALLEN, D. W. BARDAYAN, D. BLANKSTEIN, J. J. KOLATA, P. D. O'MALLEY, University of Notre Dame, F. BECCHETTI, University of Michigan — The TwinSol radioactive beam facility at the University of Notre Dame is used to study reactions of nuclear astrophysics and structure interest using in-flight produced radioactive beams. Such measurements are often limited by the energy resolution, the beam purity, and event identification. Time-of-flight (ToF) measurements of both the produced beam and the reaction products can facilitate experiments that are not currently possible. To carry out these ToF measurements, a micro-channel plate detector (MCP) and foil were setup along the beam line. Initial tests have been performed in line with a silicon detector, where the MCP creates a start signal for the particle which stops at the silicon detector. Preliminary results will be discussed further in the presentation.

<sup>1</sup>This work was supported by the National Science Foundation.

Ricky LeBlanc  
Louisiana State University

Date submitted: 25 Jul 2016

Electronic form version 1.4