## Abstract Submitted for the DNP17 Meeting of The American Physical Society

Position sensitivty with the St. George time of flight vs energy detection system<sup>1</sup> LUIS MORALES, Univ of Notre Dame, SUNIL KALKAL, Australian National University, Canberra, HYO SOON JUNG, KEK, High Energy Accelerator Research Organization, Japan, J LAURENCE, Indiana University South Bend, USA, ZACHARY MEISEL, Ohio University, USA, WILLIAM FELTMAN Univ of Notre Dame, A HANNER, E-LEXIS THORNTON, Indiana University South Bend, USA, B.B. WIGGINS, ROMUALDO DESOUZA, Indiana University Bloomington, USA, JERRY HINNEFELD, Indiana University South Bend, USA, MANOEL COUDER, MICHAEL WIESCHER, Univ of Notre Dame — At the University of Notre Dame the St. George recoil mass separator will be used to study  $(\alpha, \gamma)$  reactions of astrophysical interest. The particle identification system developed for the St. George recoil mass separator at the University of Notre Dame, in collaboration with Indiana University South Bend, utilizes time-of-flight and energy to separate reaction products from residual unreacted beam particles. The detection system uses two microchannel plate (MCP) detectors for time-of-flight, and a silicon strip detector to measure the particles kinetic energy. A position sensitive anode was designed in collaboration with Indiana University Bloomington to enhance particle identification (PID). The performance of the PID system will be presented.

<sup>1</sup>NSF PHY-1419765 PHY-0959816

Luis Morales Univ of Notre Dame

Date submitted: 30 Jun 2017 Electronic form version 1.4