2018 JINA-CEE Frontiers in Nuclear Astrophysics



Contribution ID: 90 Type: poster

Charged Particle Identification system for St. George, to study (\alpha,\gamma) reaction

Wednesday, 23 May 2018 16:30 (1h 30m)

At the University of Notre Dame the St. George recoil mass separator will be used to study (α, γ) 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 total kinetic 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 to enhance particle identification (PID). The performance of the particle identification system performance will be presented.

Primary author: Mr MORALES, Luis (University of Notre Dame)

Co-authors: WIGGINS, Blake (Indiana University Bloomington, USA); Prof. HINNEFELD, Jerry (Indiana University South Bend); Prof. COUDER, Manoel (University of Notre Dame); Prof. WIESCHER, Michael (University of Notre Dame); Prof. DESOUZA, Romualdo (Indiana university); KALKAL, Sunil (Australian National University, Canberra)

Presenter: Mr MORALES, Luis (University of Notre Dame)

Session Classification: Poster Session