Abstract Submitted
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Verifying the Acceptance of St. George[1] CHRISTOPHER SEYMOUR, University of Notre Dame, ZACH MEISEL, Ohio University, MICHAEL T. MORAN, GWENAELLE GILARDY, University of Notre Dame, JACLYN SCHMITT, Michigan State University, MANOEL COUDER, University of Notre Dame — The St. George recoil separator at the University of Notre Dame will be used to measure radiative alpha capture reaction cross sections of astrophysical interest. Low reaction rates at energies found in stellar environments inhibit standard measurement techniques due to a relatively high gamma background. Recoil separators aim to eliminate this background problem by directly detecting the heavy reaction products. In order to conduct accurate measurements, the properties of the separator must be well understood. We have performed systematic measurements of the energy acceptance over the electric and magnetic rigidities of interest for St. George at zero degrees. We will report on those measurements and on the progress to determine the angular acceptance of the separator.

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