Abstract Submitted
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Search for unbound nuclides and beam/fragment optics with the MoNA/LISA segmented target at NSCL[1] PAUL GUEYE, Hampton Univ, NATHAN FRANK, Augustana College, MICHAEL THOENNESSEN, National Superconducting Cyclotron Laboratory/Facility for Rare Isotope Beams, THOMAS REDPATH, Michigan State University, MONA COLLABORATION — A multi-layered Si/Be segmented target consisting of three 700 mg/cm2 thick Be9 slabs and four 140 microns Si detectors was used by the MoNA Collaboration at the National Superconducting Cyclotron Laboratory of Michigan State University to study the O26 lifetime. This target provides unprecedented information on the incident beams and fragments (energy loss and position), thus allowing for better determination of the incident and outgoing energies and momenta of the detected particles compare to previous experiments conducted at this facility. With the availability of a newly developed Geant4 Monte Carlo simulation of the full N2 vault, we will present and discuss the performances of this target.

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