

Abstract Submitted
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Testing Focal Plane Detectors for the SEparator for CApture Reactions (SECAR)¹ A. GARRITY, Francis Marion University, J. BLACKMON, C. DEIBEL, E. GOOD, A. HOOD, K. JOERRES, R. COTTINGHAM, Louisiana State University, SECAR COLLABORATION — The Separator for Capture Reactions (SECAR) will be installed at NSCL/FRIB to directly measure (p,γ) and (α,γ) reactions that are important in extreme stellar environments. Time-of-flight detectors like those implemented in SECAR are necessary to distinguish between the heavy products of the desired reactions and the unreacted beam. The time resolution and position sensitivity of a micro-channel plate (MCP) detector for the SECAR focal plane instrumentation were tested. We will present the findings of these tests as well as an alternate high energy design of a stopping detector. The new stopping detector will be characterized in further in-beam studies, and both it and the MCP detectors will be installed at NSCL/FRIB by 2022.

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