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Testing and Installation of a High Efficiency CsI Scintillator Array NATALIE VISCARIELLO, STUART CASAROTTO, NATHAN FRANK, Augustana College, JENNA SMITH, MICHAEL THOENNESSEN, NSCL/MSU — Experiments on neutron-rich nuclei have identified changes to the structure of nuclei far from stability. The Sweeper-MoNA- LISA facility at the National Superconducting Cyclotron Laboratory (NSCL), located at Michigan State University, is used for performing experiments on neutron-rich nuclei. Currently, these experiments are limited to the mass region below neon due to the resolution of the charged fragment detectors, which limit the isotope separation. The resolution of the system will be improved with changes to the setup, primarily due to a new scintillator array. The new array will consist of twenty-five sodium-doped CsI crystals arranged in a 5 x 5 configuration. The array will be used to measure the kinetic energy of charged fragments with energies in the GeV range. The improved resolution will allow experiments of unbound systems above neon. The testing and assembly of the detector array will be presented.

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