Improvements of the Focal Plane of SASSYER

DANIELLE CRUMP, University of Richmond, ANDREAS HEINZ, RYAN WINKLER, DANIEL FRANK, JING QIAN, Yale University, MIRELA FETEA, University of Richmond

— The Small Angle Separator System at Yale for Evaporation Residues (SASSYER) at Yale University is a gas-filled recoil separator, specializing in the investigation of the production and the structure of nuclei heavier than $^{208}$Pb. New instrumentation for the focal plane of SASSYER under development at WNSL at Yale will replace the previous equipment with a compact chamber for double-sided silicon detectors (DSSD). Here we are reporting on improvements of the focal plane of SASSYER, including DSSD electronics, a detector cooling system, and ion optics tests. MUX-16 boards from MESYTEC, 16 channel multiplexed amplifiers, were tested and quantified. An alcohol cooling system, related to the DSSD, was characterized. The ion optics tests extracted effective magnetic rigidities of the separator. Results of the tests will be presented. This work was supported by the NSF grant PHY 0555665, Jeffress Fund J-809, and USDOE grant DE-FG02-91ER-40609.

Danielle Crump
University of Richmond

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