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Improved Position Calibration for the FAUST Detector[1] LAYLA BAKHTIARI, LAUREN HEILBORN, PAUL CAMMARATA, Texas A&M University, ALAN MCINTOSH, MIKE YOUNGS, Cyclotron Institute, Texas A&M University, MATTHEW CHAPMAN, SHERRY YENNELLO, Texas A&M University
— The Forward Array Using Silicon Technology (FAUST), is a detector array used to measure charged particles resulting from heavy-ion reactions. Studying multifragmentation in these reactions can give insight into the Equation of State of nuclear matter, which is important for understanding concepts in astrophysics such as the formation of the atomic elements, neutron star development, and supernovae behavior. In order to characterize the events more fully, the current silicon detectors will be replaced with position sensitive Dual-Axis Dual-Lateral (DADL) detectors. To maximize the use of these new detectors, a procedure to perform position and energy calibrations with the fully assembled array had to be developed. Testing of the mask will be performed in two stages: a preliminary test with a single ring of the array, followed by a comprehensive test with all rings of FAUST. The new calibration procedure, including the custom designed mask and the in-beam testing results of a single ring, will be presented.

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