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Evaluating Depth of Interactions within a Planar Germanium Detector for Beta-Decay Spectroscopy ALAN LEAR, None — A new beta-decay spectroscopy system based on a planar germanium double-sided strip detector (GeDSSD) has recently been implemented at the National Superconducting Cyclotron Laboratory (NSCL). The detector is 1-cm thick with 16 5-mm orthogonal strips on the front and back face. The sensitivity of the system can be improved by determining the location of interaction of charged particles, beta-decay electrons, and low-energy gamma rays with more precision than is allowed based on the strip pitch. Techniques for determining the interaction depth of the gamma rays within the 1-cm thick detector have been studied. Interaction depth was extracted by applying a time difference algorithm to the electron and hole collection times recorded on the back and front detector contacts respectively. A description of the algorithm and its resulting position determination along with future prospects will be presented.

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None

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