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Characterization of Resolution and Efficiency of Sodium Iodide Detectors for Reaction Studies DEION WADDELL, North Carolina A&T State University, ALEX CARLS, Tennessee Technological University, PAUL THOMPSON, University of Tennessee, Knoxville, DANIEL HERTZ-KINTISH, Rutgers University, G.R.A.N.D.D.A.D COLLABORATION[1] — The study of nuclear physics with radioactive ion beams requires the understanding of detectors to be used for measuring all types of radiation. Several thallium-activated sodium iodide (NaI(Tl)) detectors were characterized with gamma-ray sources to better understand their properties so they may be utilized for future experiments. A detailed understanding of the resolution and efficiency of the detectors as a function of distance from the sources to the detector, allow us to optimize the detector placement in an experimental setup. Details of the procedure and results will be presented. Work supported in part by the U.S. Department of Energy and the National Science Foundation.

[1]Gamma Ray Analysis of NaI Detectors by Daniel Alex and Deion

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