

Abstract Submitted
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GRETINA as a Compton Polarimeter¹ P. C. BENDER, D. WEIS-SHAAR, NSCL, A. GADE, MSU, NSCL, A. WIENS, A. O. MACCHIAVELLI, C. M. CAMPBELL, R. M. CLARK, H. L. CRAWFORD, M. CROMAZ, P. FALLON, I. Y. LEE, J. RISSANEN, LBNL, S. L. TABOR, V. TRIPATHI, FSU, M. ALBERS, ANL, A. D. AYANGEAKAA, LBNL, M. P. CARPENTER, H. M. DAVID, T. LAURITSEN, S. ZHU, ANL, P. CHOWDHURY, C. J. LISTER, E. MERCHAN, V. S. PRASHER, UML, D. MILLER, TRIUMF — Characterization of GRETINA as a polarimeter using the tracking technique has been done by examining the gamma-rays emitted from polarized states following the $^{24}\text{Mg}(p,p')$ reaction[1]. Here we consider GRETINA as a traditional Compton polarimeter, where the intensity of the scattered radiation measured between physical detecting elements is used to determine its polarization sensitivity using techniques developed over the past decades. This provides a direct basic measure of the linear polarization of the array independent of the signal-decomposition and tracking algorithms, and directly comparable to traditional Compton polarimeters. The performance of GRETINA as a traditional Compton-polarimeter will be presented. [1] A. Wiens *et al.* BAPS2014..HAW.DK.2

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