

Abstract Submitted
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Inverse-kinematic proton scattering from ^{52}Ca and Implications for the GRETA Array at FRIB¹ J.S. KUSTINA, R.L. BLANCHARD, L.A. RILEY, M.L. AGIORGOUSIS, Ursinus College, T.R. BAUGHER, D. BAZIN, M. BOWRY, P.D. COTTLE, NSCL at MSU, F.G. DEVONE, Ursinus College, A. GADE, NSCL at MSU, M.T. GLOWACKI, Ursinus College, K.W. KEMPER, Florida State University, E. LUNDERBERG, NSCL at MSU, D.M. MCPHERSON, Florida State University, S. NOJI, F. RECCHIA, NSCL at MSU, B.V. SADLER, Ursinus College, M. SCOTT, D. WEISSHAAR, NSCL at MSU, R.G.T. ZEGERS, NSCL and JINA at MSU — The GRETINA gamma-ray tracking array is used to map the nuclear structure of unstable isotopes at Argonne National Laboratory, Lawrence Berkeley National Laboratory, and the NSCL at Michigan State University. GRETINA consists of 28 germanium crystals each packaged in 7 clusters of four crystals, which are capable of measuring the gamma rays given off by unstable nuclei. GRETINA is the first stage of the planned GRETA array, which will consist of 30 clusters rather than 7. We present a recent inverse-kinematics proton scattering measurement of ^{52}Ca carried out at the NSCL in May 2014. We illustrate the power of the full GRETA array at the planned Facility for Rare Isotope Beams (FRIB) by comparing this measurement with simulations of a similar measurement with GRETA at FRIB.

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