

Abstract Submitted
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Magnetic Moment Measurements on Sr-isotopes G.J. KUMBARTZKI, N. BENCZER-KOLLER, D.A. TORRES, G. GURDAL, Rutgers University, K.-H. SPEIDEL, University Bonn, T. AHN, V. ANAGNOSTATOU, M. ELVERS, P. GODDARD, G. ILIE, A. HEINZ, D. RADDECK, D. SAVRAN, V. WERNER, WNSL Yale University — Beams of even Sr isotopes were accelerated to 270 MeV at the Yale WNSL ESTU tandem accelerator. These beams were used to measure spin precessions of excited projectiles while and after traversing a polarized gadolinium foil. Transient field measurements in inverse kinematics is the method of choice when measuring magnetic moments of states with picoseconds life times with high statistical precision. However there are limiting factors, like power input to the target and lack of independent calibration points to extend and refine the parameterizations. The projectiles often pick up an alpha particle from the carbon of the multilayer target. Therefore, precession measurement on isotopes which are not available as stable beam can be simultaneously performed. Especially interesting is the reaction $^{12}\text{C}(^{84}\text{Sr}, 2\alpha)^{88}\text{Zr}$. The results of these measurements and the limitations of the method will be discussed.

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