

Abstract Submitted
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Short-lived excited-state g factors of fast $^{38,40}\text{S}$ fragments¹ KEI MINAMISONO, NSCL/Michigan State University, ANDREW STUCHBERY, The Australian National University, ANDREW DAVIES, PAUL MANTICA, NSCL/Michigan State University — The transient field technique for measuring short-lived excited-state magnetic dipole moments generally requires ion velocities comparable to Zv_0 ($v_0 = c/137$) or lower, which, at face value, would preclude the study of the wide range of isotopes available at fragmentation facilities. However, stringent testing of nuclear models far from stability can be realized with g -factor measurements of these isotopes, once the experimental challenges are overcome. Measurements performed at the NSCL's Coupled Cyclotron Facility have extended the transient field technique to radionuclides produced as in-flight fast fragments. The high velocity transient field technique was applied to intermediate-energy beams of ^{38}S and ^{40}S . The signs of their first-excited 2^+ state g factors were obtained, and with a parametrization of the transient field strength at high velocities, the g -factor magnitudes were extracted. Results, experimental details, and future outlook will be presented.

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