

Abstract Submitted
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Single-Neutron Transfer to ^{50}Ti ¹ J. M. NEBEL-CROSSON, L. RILEY, Ursinus College, L. T. BABY, P. COTTLE, J. C. ESPARZA, K. HANSELMAN, K. KEMPER, G. MCCANN, I. WIEDENHOEVER, Florida State University, A. CONLEY, S. LESHER, R. TRAAS, University of Wisconsin-La Crosse, A. KUCHERA, G. SELBY, Davidson College — Single-neutron states of ^{51}Ti have been studied using the reaction $^{50}\text{Ti}(d,p)^{51}\text{Ti}$ with a deuteron energy of 16 MeV at the John D. Fox Laboratory at Florida State University using the Super-Enge Split-Pole Spectrograph. Proton momentum spectra were measured at a scattering angle range of 10-50 degrees at five degree increments. This work is motivated by discrepancies between recent inelastic proton-scattering measurements of collective octupole states of neutron-rich calcium and titanium isotopes and Random Phase Approximation predictions, which depend on empirically-determined single-neutron structure beyond ^{48}Ca . Preliminary results and plans of future analysis will be discussed.

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Jessica Nebel-Crosson
Ursinus College

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