

Abstract Submitted
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Collinear laser spectroscopy of stable ^{55}Mn I in the BECOLA facility at NSCL¹ A. KLOSE, P.F. MANTICA, K. MINAMISONO, A. SCHNEIDER, NSCL/Michigan State University — Laser spectroscopy was performed on stable ^{55}Mn atoms using the collinear laser spectroscopy system of the BEam COoling and LAser spectroscopy (BECOLA) facility at the National Superconducting Cyclotron Laboratory at Michigan State University. Mn^+ ions were extracted from a commercial ion source at 15 keV and neutralized in a Na vapor cell via charge-exchange reactions. The Mn atomic beam was co-propagated with laser light, and hyperfine spectra for both the ground and metastable states were measured by detecting laser-induced fluorescence. Analysis of the hyperfine spectra will be presented and future laser studies of other transition metal elements using BECOLA will be discussed.

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