

Abstract Submitted
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Single-particle states in ^{112}Cd probed with the $^{111}\text{Cd}(\vec{d},p)$ reaction¹ P.E. GARRETT, D. JAMIESON, G.A. DEMAND, P. FINLAY, K.L. GREEN, K.G. LEACH, A.A. PHILLIPS, C.S. SUMITHRARACHCHI, C.E. SVENSSON, S. TRIAMBAK, J. WONG, University of Guelph, G.C. BALL, TRIUMF, R. HERTENBERGER, H.-F. WIRTH, Ludwig-Maximilians-Universitat Muenchen, R. KRÜCKEN, T. FAESTERMANN, Technische Universitat Muenchen — As part of a program of detailed spectroscopy of the Cd isotopes, the single-particle neutron states in ^{112}Cd have been probed with the $^{111}\text{Cd}(\vec{d},p)$ reaction. Beams of polarized 22 MeV deuterons, obtained from the LMU/TUM Tandem Accelerator, bombarded a target of ^{111}Cd . The protons from the reaction, corresponding to excitation energies up to 3 MeV in ^{112}Cd , were momentum analyzed with the Q3D spectrograph. Cross sections and analyzing powers were fit to results of DWBA calculations, and spectroscopic factors were determined. The results from the experiment, and implications for the structure of ^{112}Cd , will be presented.

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Paul Garrett
University of Guelph

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