

Abstract Submitted  
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**(p,t) Studies of Even-Even Pd Nuclei** R. WINKLER, R.F. CASTEN, C. LAMBIE-HANSON, A. HEINZ, J. QIAN, Wright Nuclear Structure Laboratory, Yale University, T. FAESTERMANN, R. GRAEGER, R. KRÜCKEN, M. MAHGOUB, H.-F. WIRTH, Technical University of Munich, N. BRAUN, S. CHRISTEN, University of Cologne, R. HERTENBERGER, Ludwig-Maximilians-University Munich — Detailed studies of stable even-even Pd isotopes have been carried out using the two-neutron pickup reaction (p,t). The use of a Q3D spectrograph coupled with a high position resolution focal plane detector at the Maier-Leibnitz Laboratory of LMU and TU Munich was vital in the level energy, spin, and parity assignments of the populated low spin states. The spin and parity assignments were determined through comparison of angular distributions of the observed states with DWBA calculations. The results of this series of experiments, a near complete set of  $0^+$ ,  $2^+$ , and  $4^+$  states below an excitation energy of 3.5 MeV for  $^{102,106,108}\text{Pd}$ , will be presented. Analysis including the comparison of the experimental results with theoretical predictions will be discussed. This work is supported by U.S. DOE Grant No. DE-FG02-91ER-40609.

Ryan Winkler  
Yale University

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