

Abstract Submitted  
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**Beta-decay of  $^{122}\text{Ag}$  and structure of  $^{122}\text{Cd}$**  A.V. RAMAYYA, Vanderbilt Univ., Y.X. LUO, Vanderbilt Univ./LBNL, N.T. BREWER, Vanderbilt Univ., J.C. BATCHELDER, UNRIB/ORAU, J.H. HAMILTON, Vanderbilt Univ., C.J. GROSS, ORNL, K.P. RYKACZEWSKI, ORNL/Warsaw Univ., R. GRZYWACZ, M. MADURGA, D. MILLER, Univ. Tennessee, D. STRACENER, C. JOST, ORNL, E. ZGANJAR, Louisiana State Univ., J.A. WINGER, Mississippi State Univ., M. KARNY, ORNL/ORAU/Warsaw Univ., S.V. PAULAUSKAS, Univ. Tennessee, S.H. LIU, ORNL, M. WOLINSKA-CICHOCKA, ORNL/ORAU, S. PADGETT, Univ. Tennessee, T. MENDEZ, K. MIERNIK, ORNL, A. KUZNIAK, Univ. Tennessee/Warsaw Univ. — The structures of even-even Cd nuclei are considered to be an important testing ground for vibrational states coupled to intruder states with rotational degrees of freedom. In addition, there may be up to 3 isomeric states in  $^{122}\text{Ag}$ . Two of them are very similar in their adopted values for lifetime. We produced a  $^{122}\text{Ag}$  nucleus via proton induced fission of  $^{238}\text{U}$ . Subsequent decay of  $^{122}\text{Ag}$  to  $^{122}\text{Cd}$  is investigated at the Low-energy RIB Spectroscopy Station (LeRIBSS) at the HRIBF. Many new levels and new gamma transitions in  $^{122}\text{Cd}$  were observed. The parent half-life was also observed. The structure of this isotope will be discussed.

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