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Reporting the β-decay study of neutron rich ^{75}Zn into ^{75}Ga using LeRIBSS at HRIBF.[1] DURGA SIWAKOTI, Mississippi State Univ, S.V. ILYUSHKIN, Colorado School of Mines, J.A. WINGER, Mississippi State Univ, K.P. RYKACZEWSKI, C.J. GROSS, ORNL Oak Ridge, J.C. BATCHELDER, UNIRIB ORAU , L. CARTEGNI, Univ of Tennessee, I.G. DARBY, Univ of Tennessee, Katholieke Univ Leuven, R. GRZYWACZ, ORNL Oak Ridge, Univ of Tennessee, J.H. HAMILTON, Vanderbilt Univ, A. KORGUL, Univ of Tennessee, Univ of Warsaw, S.N. LIDDICK, Univ of Tennessee, NSCL, C. MAZZOCCHI, Univ of Tennessee, Univ of Warsaw, T. MENDEZ, ORNL Oak Ridge, S. PADGETT, Univ of Tennessee, M.M. RAJABALI, Univ of Tennessee, Katholieke Univ Leuven, D. SHAPIRA, ORNL Oak Ridge, W. KROLAS, Polish Academy of Sciences, D.W. STRACENER, ORNL Oak Ridge, E.F. ZGANJAR, Louisiana State Univ — Recent updates on β decay of ^{75}Zn into ^{75}Ga are presented with the decay scheme and structure of ^{75}Ga. The present study utilized a more efficient detector setup along with high purity of the ^{75}Cu beam in comparison to previous studies with a rate of over 2000 ions/s. The purity of beam which is obtained by using high-resolution isobar separator prevented any member of the decay chain from being dominant and allowed for comparisons of branching rations between the decays. The greater efficiency of the HPGe detector array meant more low energy γ-ray detection from the decays. The γ-γ and β-γ coincidence data obtained from the experiment were collected at the LeRIBSS (Low energy Radioactive Ion Beam Spectroscopy Station) and used to develop a revised decay scheme using an objective method.

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