

Abstract Submitted
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Measurement of decay properties for r-process models¹ NEERAJAN NEPAL, Central Michigan Uni, A. ALGORA, IFIC, Spain, A. ESTRADE, Central Michigan Uni, S. NISHIMURA, RIKEN, J. ARGAMUNT, IFIC, Spain, R. CABALLERO-FOLCH, TRIUMF, F. CALVINO, UPC, Spain, T. DAVINSON, Uni of Edinburgh, I. DILLMANN, TRIUMF, R. GRYWACZ, Uni of Tennessee, G. KISS, MTA Atomki, J. LIU, Uni of Hong Kong, G. LORUSSO, NPL, UK, V. PHONG, RIKEN, B.C. RASCO, K.P. RYKACZEWSKI, ORNL, J.L. TAIN, IFIC, Spain, A. TARIFENO-SALDIVIA, UPC, Spain, A. TOLOSA-DELGADO, IFIC, Spain, P. WOODS, Uni of Edinburgh, R. YOKOYAMA, Uni of Tennessee — Understanding the rapid neutron capture nucleosynthesis process (r-process) requires precise data on decay properties, in particular half-lives ($T_{1/2}$) and probability of beta delayed neutron emission (P_n). We did an experiment to measure $T_{1/2}$ and P_n values of neutron-rich isotopes around mass $A = 100$ using the state-of-the-art instrumentation of the beta-delayed neutron detector at RIKEN (BRIKEN) in the Radioactive Ion Beam Factory (RIBF) at RIKEN lab in Japan. The current status of the analysis will be presented. We also performed r-process calculations using the Webnucleo reaction network code using thermodynamic trajectories that parameterize conditions that lead to a r-process. We will present the importance of $T_{1/2}$ and P_n values of neutron-rich isotopes around the mass $A = 100$ to r-process calculations

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