Abstract Submitted
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$\beta-$Decay Study of the rp-Process Nucleus ^{96}Cd[1] ANA BECERRIL, A. AMTHOR, T. BAUMANN, D. BAZIN, H. CRAWFORD, A. ESTRADE, A. GADE, T. GINTER, C. GUESS, M. HAUSMANN, G. HITT, G. LORUSSO, P. MANTICA, M. MATOS, R. MEHARCHAND, K. MINAMISONO, F. MONTES, J. PEREIRA, G. PERDIKAKIS, J. PINTER, M. PORTILLO, H. SCHATZ, K. SMITH, J. STOKER, R. ZEGERS, National Superconducting Cyclotron Laboratory
— The half-life of ^{96}Cd, one of the major waiting points along the reaction path of the rp-process [1] has been measured at NSCL. Nuclei of interest were produced by fragmentation of a 120 MeV/u ^{112}Sn primary beam on a Be target and selected with the A1900 fragment separator in conjunction with the RF Fragment Separator [2]. The experimental setup, which consisted on the NSCL β-Counting System [3] and the Segmented Germanium Array [4], permitted the correlation of implants and decays as well as the detection of both prompt and β-delayed γ-rays from implanted ions. Details of the experiment and results will be presented and their implications discussed. [1] H. Schatz et al., Phys. Rep. 294, 167 1998 [2] D. Gorelov et al. PAC 2005, Knoxville, TN, May 16-20 [3] J. Prisciandaro et al., NIM A 505, 140 2003 [4] W. Mueller et al., NIM A 466, 492 2001

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