Abstract Submitted
for the DNP19 Meeting of
The American Physical Society

β-Delayed Proton Emission of ^{71}Kr[1] S. WANIGANETHTHI, UMass Lowell (UML), D.E.M. HOFF, A.M. ROGERS, P.C. BENDER, UML, K. BRANDENBURG, Ohio University (OU), K. CHILDERS, National Superconducting Cyclotron Laboratory (NSCL), J.A. CLARK, Argonne National Laboratory, A.C. DOMBOS, NSCL, E.R. DOUCET, UML, S. JIN, R. LEWIS, S.N. LIDDICK, NSCL, C.J. LISTER, UML, Z. MEISEL, OU, C.M. MORSE, UML, H. SCHATZ, K. SCHMIDT, NSCL, D. SOLTESZ, S.K. SUBEDI, OU — Mirror nuclei above $A \sim 60$ play a key role in understanding the role of isospin in nuclear structure. The character of states in the ^{71}Kr/^{71}Br mirror pair ($T = 1/2$), that exhibit oblate-prolate shape coexistence, has been of significant interest for many years. Properties of this mirror system were investigated in an implant-decay experiment conducted at the NSCL using a beam containing ^{71}Kr, produced by fragmentation of a ^{92}Mo primary beam on a Be target and purified with the RF Fragment Separator, that was implanted into the Beta Counting Station surrounded by SeGA. β-decay branching to the lowest states of ^{71}Br was observed as well as delayed-proton emission feeding the lowest states of ^{70}Se. The results obtained from charged particle and γ-ray spectroscopy as well as implications for the structure of nuclei with $N \sim Z$ will be presented

[1]This material is based upon work supported by the U.S. DOE, Office of Science, Office of Nuclear Physics under Award No. DE-FG02-94ER40848, DE-FG02-88ER40387 and DE-AC02-06CH11357; the NNSA through the Nuclear Science and Security Consortium under Award No. DE-NA0003180, DE-NA0003221, DE-NA0002132 and DE-NA0000979; and the NSF under Contract No. PHY-1102511.

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Date submitted: 01 Jul 2019 Electronic form version 1.4