Abstract Submitted
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Exploring single-hole state evolution near the $N = 50$ shell closure[1] PEI-LUAN TAI, M. E. HOWARD, A. S. ADEKOLA, J. A. CIZEWSKI, B. MANNING, L. J. SCHRADIN, Rutgers, M. A. FAMIANO, WMU, D. BAZIN, Z. CHAJECKI, NSCL, D. COUPLAND, R. HODGES, J. LEE, W. LYNCH, A. SANETULLAEV, M. B. TSANG, J. WINKELBAUER, M. YOUNGS, MSU, S. AHN, K. SCHMITT, UTK, D. W. BARDAYAN, K. Y. CHAE, D. SHAPIRA, Physics Division, ORNL, T. K. GHOSH, VECC, India, R.R.C. CLEMENT, LANL — It is of interest to understand how nuclear structure evolves near the $N = 50$ closed shell and towards more neutron-deficient nuclei. To obtain a more clear picture of the systematics of neutron-hole states in $N = 49$ isotones, $^{83}_{34}$Se and $^{85}_{36}$Kr were produced through the one-neutron stripping (p, d) reaction to populate single-neutron-hole states. The experiment was performed at the National Superconducting Cyclotron Laboratory with 35 MeV/u ^{84}Se and 45.5 MeV/u ^{86}Kr beams that impinged on C_2H_4 targets. The charged-particle detectors, HiRA, were used to identify emitted deuterons and measure their angles and energies; heavier recoils were identified and analyzed by the S800 Spectrograph. Preliminary PID maps, Q-value spectra and angular distribution will be presented.

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