Abstract Submitted for the DNP11 Meeting of The American Physical Society

Exploring Single-Hole State Evolution Near the N=50 Shell Closure¹ M.E. HOWARD, J.A. CIZEWSKI, B. MANNING, P.D. O'MALLEY, Rutgers University, D. BAZIN, Z. CHAJECKI, D. COUPLAND, R. HODGES, J. LEE, W. LYNCH, A. SANETULLAEV, M.B. TSANG, J. WINKELBAUER, M. YOUNGS, National Superconducting Cyclotron Laboratory, T.K. GHOSH, Variable Energy Cyclotron Centre, R.R.C. CLEMENT, Los Alamos National Laboratory, D.W. BARDAYAN, K.Y. CHAE, D. SHAPIRA, Oak Ridge National Laboratory, S.H. AHN, K. SCHMITT, University of Tennessee, M.A. FAMIANO, Western Michigan University — The ⁸⁴Se(p,d)⁸³Se and ⁸⁶Kr(p,d)⁸⁵Kr reactions at 45 MeV/u in inverse kinematics were measured at the National Superconducting Cyclotron Laboratory, using the charged particle detector HiRA and the S800 spectrometer. This experiment is the first to use the full complement of 20 HiRA telescopes. The primary goal is to extract angular momentum quantum numbers and neutron spectroscopic factors for the ground and first excited states of ⁸³Se. Details of the experiment and a status report on the data analysis will be discussed.

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