Abstract Submitted
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Neutron hole states in ^{131}Sn studied via the ^{132}Sn(d,t)^{131}Sn reaction[1] RICCARDO ORLANDI, ASRC, JAEA, Japan and IEM-CSIC, Madrid, Spain, S.D. PAIN, D.W. BARDAYAN, C.J. GROSS, M.S. SMITH, ORNL, TN USA, A. JUNGCLAUS, IEM-CSIC, Spain, S. AHN, K.L. JONES, S.T. PITTMAN, K.T. SCHMITT, UT Knoxville, TN USA, K.A. CHIPPS, CSM, CO, USA, J.A. CIZEWSKI, M. HOWARD, B. MANNING, P.D. O'MALLEY, A. RATKIEWICZ, Rutgers, NJ USA, W.A. PETERS, ORAU, TN USA, M. MATOS, LSU, LA USA, R. CHAPMAN, J.F. SMITH, UWS, Paisley, UK, W. CATFORD, C. SHAND, U. Surrey, UK — Knowledge of single-particle energies in the vicinity of exotic doubly-magic nuclei is of critical importance to understand evolution of nuclear structure. In the present work, the ^{132}Sn(d,t)^{131}Sn reaction (Q=-1.055 MeV) was studied in inverse kinematics at HRIBF of Oak Ridge National Laboratory. The ^{132}Sn ISOL beam was post-accelerated to an energy of 4.39 MeV/u using the ORNL HRIBF accelerator. The beam (average intensity of $\sim$1.2e4 pps) impinged on a $\sim$250-μg/cm^2 deuterated polyethylene target, for approximately 4 days. Ejected tritons were detected using the Super ORRUBA array of segmented Si telescopes. Low-lying states in ^{131}Sn were populated in the experiment. Preliminary results will be shown.

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