## Abstract Submitted for the APR08 Meeting of The American Physical Society

Spectroscopy of exotic 123,125Ag produced in fragmentation reactions<sup>1</sup> I. STEFANESCU, University of Maryland, W.B. WALTERS, N. HOTELING, B. TOMLIN, P.F. MANTICA, J. PEREIRA, A. BECERRIL, T. FLECKENSTEIN, A.A. HECHT, G. LORUSSO, M. QUINN, J.S. PINTER, J.B. STOKER — We extended the experimental knowledge in the mass-region around 132Sn by identifying the decay of high-spin isomers in the exotic odd-mass 123,125Ag. The two isotopes were produced at the NSCL laboratory by projectile fragmentation of a 136Xe beam at 120MeV/u directed onto a thick Be target. The NSCL Beta Counting System, was used identify secondary beam fragments. Prompt and delayed gamma-rays following the deexcitation of the fragments were detected with the SEGA array. Partial level schemes for 123,125Ag are proposed for the first time. The observed states show single-particle characteristics, indicating strong Z=50 and N=82 shell gaps and also support the proposed weakened nucleon-nucleon interaction in this mass-region.

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