Abstract Submitted for the DNP13 Meeting of The American Physical Society

Conversion electron measurements of ¹⁹⁵Au using ICEBall for Nuclear Structure and Astrophysics at the University of Notre Dame ANTHONY BATTAGLIA, WANPENG TAN, ANI APRAHAMIAN, WILLIAM BAUDER, CLARK CASARELLA, University of Notre Dame, GULHAN GURDAL, Argonne National Laboratory, ALEXANDER LONG, ANDREW NYSTROM, KEVIN SIEGL, KARL SMITH, MALLORY SMITH, University of Notre Dame — The Internal Conversion Electron Ball Array (ICEBall)¹ consists of six Si(Li) detectors and it was recently re-comissioned² at the University of Notre Dame Nuclear Science Laboratory for spectroscopic studies of heavy nuclei. For the commissioning experiment, a 16 MeV bunched proton beam was used from the FN Tandem for a (p,2n) reaction to populate low spin states of ¹⁹⁵Au. Both conversion electrons and gamma-rays were detected in coincidence between ICEBall and a single high-purity germanium detector. A total of 14 conversion coeffcients were measured. The results will be presented and compared to previous results.³ This work was supported by the National Science Foundation under contract number NSF PHY-1068192.

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¹M.P. Metlay, J.X. Saladin, I.Y. Lee, and O. Dietzsch, Nucl. Instrum. Meth. A, 336, 162 (1993)

²A. Battaglia et al. to be submitted

³S. M. Fischer, Spectroscopic Studies of the Nucleus 195-Au, Ph.D. thesis, University of Notre Dame (1994).