

Abstract Submitted  
for the APR07 Meeting of  
The American Physical Society

**Neutron single-particle states and beta-delayed neutron branching ratios near  $^{78}\text{Ni}$**  M.M. RAJABALI, R. GRZYWACZ, S.N. LIDDICK, C. BINGHAM, I. DARBY, University of Tennessee, C. MAZZOCCHI, IFGA, University of Milan and INFN, K. RYKACZEWSKI, ORNL, J. BATCHELDER, UNIRIB, T. BAUMANN, T. GINTER, P. MANTICA, NSCL, M. KARNY, K. MIERNIK, M. PFUTZNER, IEP Warsaw University, S.V. ILYUSHKIN, J. WINGER, Mississippi State University, W. KROLAS, Polish Academy of Sciences — The measurement of low-energy excited states in  $^{71-75}\text{Ni}$  populated through the beta decay of  $^{71-75}\text{Co}$  isotopes was performed at the NSCL at MSU. The  $^{71-75}\text{Co}$  isotopes were obtained from the fragmentation of  $^{86}\text{Kr}$  beam, at 140 AMeV, on a Be target. The experimental setup consisted primarily of a thick Double-sided Silicon Strip Detector for the correlation of implanted ions with their subsequent beta decays and the NSCL Segmented Germanium Array (SeGA) to monitor the emitted gamma rays. All detectors were read out with a new digital data acquisition system based on new generation Pixie16 produced by XIA and further developed at the University of Tennessee and Oak Ridge National Laboratory. Preliminary results of the experiment will be presented.

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Date submitted: 16 Jan 2007

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