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Evidence of n-γ Competition in ^{69,71}Co Decay STEPHANIE LYONS, A. SPYROU, S. N. LIDDICK, National Superconducting Cyclotron Laboratory, F. NAQVI, R. SURMAN, University of Notre Dame, B. P. CRIDER, A. C. DOMBOS, National Superconducting Cyclotron Laboratory, D. L. BLEUEL, Lawrence Livermore National Laboratory, B. A. BROWN, National Superconducting Cyclotron Laboratory, A. COUTURE, Los Alamos National Laboratory, L. CRESPO CAMPO, M. GUTTORMSEN, A. C. LARSEN, University of Oslo, R. LEWIS, National Superconducting Cyclotron Laboratory, MSU, P. MOLLER, S. MOSBY, M. R. MUMPOWER, Los Alamos National Laboratory, G. PERDIKAKIS, National Superconducting Cyclotron Laboratory, C. J. PROKOP, Los Alamos National Laboratory, T. RENSTROM, S. SIEM, University of Oslo, S. J. QUINN, National Superconducting Cyclotron Laboratory, S. VALENTA, Charles University in Prague — The r-process is known to produce roughly half of the isotopes of heavy elements. Sensitivity studies have shown that the final abundance distributions of r-process nuclei are affected by various input parameters, including nuclear masses and β-delayed neutron-emission probabilities. While it is expected that neutron capture dominates above the neutron threshold, recent measurements of β-decay on r-process nuclei have observed γ-emission above the neutron threshold. This may have an effect on the final abundances of r-process nuclei. For this reason, β-decay intensities for ^{69,71}Co were measured using the technique of total absorption spectroscopy at the NSCL. The experimental results reveal another case of neutron-γ competition. The implications on r-process nucleosynthesis will be discussed.

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