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Indirect Study of Neutron Capture for 63Fe(n,g) MALLORY SMITH, ARTEMIS SPYROU, NSCL, WEI JIA ONG, LLNL, SUNGHOON AHN, TAMU, ALEX DOMBOS, Univ. of Notre Dame, SEAN LIDDICK, FERNANDO MONTES, NSCL, FARHEEN NAQVI, Univ. of Delhi, DEBRA RICHMAN, HENDRICK SCHATZ, JUSTIN BROWNE, KATIE CHILDERS, NSCL, BEN CRIDER, Mississippi State Univ., CHRIS PROKOP, LANL, ERIC DELEEUW, NSCL, PAUL DE YOUNG, Hope College, CHRISTOPH LANGER, Univ. of Frankfurt, BECKY LEWIS, NSCL, ZACH MEISEL, Ohio University, JORGE PEREIRA, NSCL, STEVE QUINN, J Hopkins Univ. Applied Physics Lab, KONRAD SCHMIDT, TU Dresden, ANN CECILIE LARSEN, MAGNE GUTTORMSEN, Univ. of Oslo — Far from stability, little is known about neutron capture. An indirect method known as the βOslo method allows n-capture rates to be experimentally constrained for radioactive nuclei. The reaction product is populated in βdecay, and the γ strength functions (γSFs) and nuclear level densities (NLDs) are extracted simultaneously. These are used to constrain the n-capture rate. In the FeCd region, an unexpected low-energy enhancement (LEE) in the γ-decay probability has been observed. The presence of this can have a significant influence on neutron capture rates. The LEE is expected in the neutron-rich Fe isotopes. At the NSCL, 64Fe was measured with the Summing NaI detector. Recent results will be presented with a focus on the presence of the LEE.

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