

Abstract Submitted
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Neutron Photoproduction from Sn with Linearly Polarized γ -rays between 13 and 15 MeV¹ J. HAUVER, W. HENDERSON, C.S. WHISNANT, James Madison University, M. AHMED, J. MUELLER, L. MYERS, S. STAVE, H.R. WELLER, TUNL, Duke University — Data have been collected at the High Intensity γ -ray Source (HI γ S) to investigate neutron emission from a natural Sn target with linearly polarized gamma rays at $E_\gamma = 13, 15,$ and 15.5 MeV. Liquid scintillator detectors were placed at scattering angles of $55^\circ, 90^\circ$ and 125° above, below and to the left and right of the target. Four additional detectors were placed at angles of 72° and 107° along the top and right. The E_γ dependence of the ratios of neutron yields, $\frac{I_{para}}{I_{perp}}$ are examined. The ratio at 90° should depend only on the $P_2(\cos(\theta))$ coefficient in the angular distribution. A comparison of these results will be discussed.

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Steve Whisnant
James Madison University

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