

Abstract Submitted
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Tagging Efficiency Measurements at the A2 Glasgow Photon Tagging Facility at MAMI¹ BRENDAN FREEHART, The George Washington University, THE CRYSTAL BALL AND TAPS COLLABORATION — We present the analysis of experiment-specific measurements of the efficiency of the Glasgow Photon Tagging Spectrometer in the A2 Hall at the Mainz Microtron (MAMI C). The photon tagger is being used for Crystal Ball and TAPS experiments. MAMI C is a particle accelerator capable of producing energies of up to 1.604 GeV. Photons are produced from the MAMI electron beam via bremsstrahlung on a thin radiator. Electrons that have radiated photons are analyzed by the tagger spectrometer. The photons are collimated, and thus only a fraction of the “tagged” photons get to the target. Special runs measure the ratio of analyzed electrons to tagged photons at the target position. This ratio is used to normalize the experimental cross section. We present tagging efficiencies for experiments eta production on Helium-3, threshold pion production, and meson production on the proton and deuterium.

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