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Study of the Reaction $\gamma p \to \omega \eta p^1$ EDMUNDO BARRIGA, Florida State University, GLUEX COLLABORATION — The GlueX experiment has produced the largest statistics for peripheral photoproduction of mesons with a goal to unambiguously identify new and exotic mesons. Here we will present preliminary results on the reaction $\gamma p \to p \, \pi^+ \pi^- \pi^0 \eta$. The data set was obtained at the Thomas Jefferson National Accelerator Facility utilizing the GlueX detector and a tagged linearly polarized photon beam of 8.0 to 9.0 GeV incident on a liquid hydrogen target. The focus of this study is to search for possible intermediate resonances which decay to $\omega \eta$. The ω is identified via the $\pi^+\pi^-\pi^0$ decay mode and the η and π^0 are identified via the decay to 2 γ . General features of the data will be presented along with plans for future studies.

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