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Studies of the $\omega\pi\pi$ Final State at GlueX[1] AMY SCHERTZ, College of William and Mary, GLUEX COLLABORATION — Signals for exotic mesons, which have quantum numbers that aren't allowed for a quark-antiquark pair, have been experimentally observed, but their exact nature is still unknown. A candidate for these exotics is the hybrid meson, which consists of a quark, an antiquark, and an excited gluon. GlueX, a photoproduction experiment in Jefferson Lab's Hall D, aims to map the spectrum of light quark mesons by studying a multitude of final states allowed by the detector's large acceptance. Evidence for the lightest expected exotic hybrid meson has been shown in a partial wave analysis by the BNL E852 experiment of the $\omega\pi\pi$ final state in pion production. In this talk, studies of the reaction $\gamma p \to \omega\pi\pi p$ at GlueX will be presented.

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