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Photoproduction of the $b_1(1235)$ meson in GlueX¹ AHMED FODA, ZISIS PAPANDREOU, Univ of Regina, GLUEX COLLABORATION COLLABORATION — The GlueX detector is essentially hermetic, thus allowing reconstruction of all final state particles from photoproduction off a liquid hydrogen target at 9 GeV. In this talk we discuss the channel $\gamma p \to p \pi^+ \pi^- 4 \gamma$ with focus on the reaction $\gamma p \to p b_1(1235)$, where the axial-vector meson $b_1(1235)$ decays to $\omega \pi$. This investigation will commence by inspecting the invariant mass spectra and Dalitz plots as a function of the Mandelstam variable -t, to investigate the production mechanism of the b_1 and serve as the first step in investigating the decays of heavier mesons to $\omega \pi^0$.

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