

Analysis of $\eta\pi^0$ and $\eta'\pi^0$ Systems at GlueX

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The GlueX experiment at Jefferson Lab aims to study the light-quark meson spectrum with an emphasis on the search for hybrid mesons. The $\eta\pi^0$ and $\eta'\pi^0$ final states are promising channels for this search. Several experiments have observed a contribution with exotic quantum numbers in these channels in the past, but the resonance interpretation is not well established. GlueX will contribute significant complementary information to this discussion by studying the production with a polarized 9 GeV photon beam. The comparison between both channels can shed light on the nature of the exotic mesons, in particular their flavor content. We will present preliminary results obtained from an initial dataset recorded in 2017.

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