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Photoproduction of η' mesons with the GlueX experiment¹ MAH-MOUD KAMEL, Florida International University, GLUEX COLLABORATION COLLABORATION — The GlueX experiment at Jefferson Lab studies the light meson spectrum and searches for hybrid and exotic mesons. In this experiment, a 9 GeV tagged, linearly polarized photon beam interacts with a liquid hydrogen target at the center of the GlueX detector. First results of the photo-production of η' mesons at beam energies ranging from 3.5 to 11 GeV will be presented. The η' have been identified through the decay channel $\eta' \to \pi^+\pi^-\gamma$, which has a large branching ratio of 29%. No data exist for beam energies above 6 GeV for this reaction.

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Mahmoud Kamel Florida International University

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