Abstract Submitted
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Dalitz Decay of Pseudoscalar Mesons from Photoproduction on Hydrogen Target with CLAS MICHAEL KUNKEL, MOSKOV AMARYAN, Old Dominion University, MICHAEL PAOLONE, Temple University, DENNIS WEYGAND, Thomas Jefferson National Accelerator Facility, CLAS COLLABORATION — Experimental results on the Dalitz decay of pseudoscalar mesons $P(\pi^0, \eta, \eta') \to e^+e^-\gamma$ produced in the photoproduction reaction $\gamma + p \to P(\pi^0, \eta, \eta')$ + p on a Hydrogen target, with CLAS setup at Thomas Jefferson National Accelerator Facility (TJNAF), are presented. The total statistics collected for π^0, η Dalitz decay exceeds the world's published statistics by an order of magnitude, while the Dalitz decay of $\eta' \to e^+e^-\gamma$ is observed and measured for the first time. The data obtained will allow for measurements of transition form factors that are encoded in the mass spectrum of the e^+e^- system. The current status of analysis of the π^0, η transition form factors and the search for the heavy photon from the e^+e^- mass system will be discussed.

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