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Light Meson Spectroscopy: First Results from GlueX[1]

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The GlueX experiment is optimized to search for and study light hybrid mesons utilizing a 9 GeV linearly polarized photon beam that is derived from the 12 GeV electron beam of the recently upgraded CEBAF at Jefferson Lab. Construction of the GlueX detector was completed in winter 2015, and it was commissioned and calibrated using data collected in 2015 and 2016. During the spring of 2016 the first substantial data acquisition period was conducted with the detector and beamline in its design configuration. The data from this pilot physics run exceed the statistical capability of existing polarized photoproduction data sets in this energy regime by orders of magnitude. In this talk the broad objectives of the GlueX physics program will be reviewed along with the status and performance of the detector. Ongoing data analysis activities will be summarized, and the plan for both additional data acquisition and analysis to pursue the goal of searching for hybrid mesons will be outlined.

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