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The Search for Exotic Baryons at HERMES WOUTER DECON-INCK, WOLFGANG LORENZON, University of Michigan, HERMES COLLABO-RATION — An experimental search for the  $\Theta^+(1540)$  and  $\Xi^{--}(1862)$  resonances was performed using the decay modes  $pK_s$  and  $\Xi^-\pi^-$ , respectively. While evidence for a  $\Theta^+(1540)$  with a statistical significance of  $4\sigma$  is presented, no evidence for the  $\Xi^{--}(1862)$  is found. The absence of a peak in the  $\Xi^-\pi^-$  spectrum near 1862 MeV allows only to estimate an upper limit for quasi-real photoproduction of the  $\Xi^{--}(1862)$ . Systematic studies and future plans will be discussed as well. Among those is an attempt to use time-of-flight identification to probe low momentum  $\Theta^+$ production.

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