

MESON PHOTOPRODUCTION AND BARYON RESONANCES AT MAMBO EXPERIMENT

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Abstract

Photoproduction of mesons within the framework of the MAMBO experiment (BGO-OD at Bonn plus MAMI at Mainz) was studied. The results on the operative work of the cryogenic H_2/D_2 target system during the last commissioning beam times at the March and June 2012 are shown. Investigation of the single charged pion photoproduction was provided using a polarized ^3He target at the tagged photon facility of the MAMI accelerator. Unpolarized and helicity dependent cross sections are presented for channels $\gamma N \rightarrow \pi^\pm X$ in the $\Delta(1232)$ baryon resonance region.