STRONG2020 (Second Strong2020 online Workshop)



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Photoproduction of baryon resonances - recent results from the A2 collaboration

Wednesday, 15 September 2021 17:20 (20 minutes)

An important tool to experimentally probe the nucleon excitation spectrum is the study of meson photoproduction reactions. Partial wave analyses are used to extract the baryon resonances from the experimental data. For an unambiguous solution it is not enough to only measure the unpolarized cross section, but several single and carefully chosen double polarization observables are needed in addition.

Several experimental facilities have dedicated programs to measure these polarization observables in different photoproduction reactions using e.g. a polarized photon beam and a polarized target, like the Crystal Ball experiment located at the accelerator facility MAMI in Mainz.

This talk will present recent results concerning the polarization observables G and E in the $\gamma p \rightarrow p\pi 0$ and $\gamma p \rightarrow n\pi +$ reactions.

Presenter: AFZAL, Farah (University of Bonn) **Session Classification:** Oral Presentations