

Recent results from the A2 collaboration at MAMI

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The study of the excited states of the nucleon is a powerful tool for the understanding of its structure in the non-perturbative regime of QCD, which is one of the major challenges of modern physics.

Meson photoproduction, as well as other photon-induced reactions, allow to study the excitation spectra of the nucleons and, in combination with the use of a polarized beam and/or target, allow to determine the properties of the nucleon resonances by accessing many different polarization observables with high precision.

The A2@MAMI Collaboration has undertaken a broad experimental program for a systematic measurement of these observables, using a linearly and/or circularly polarized photons on longitudinally polarized proton and deuteron targets, for energies up to 1.6-GeV.

An overview of the ongoing studies as well as recent results from the A2 Collaboration on a wide range of different observables will be given, together with an outlook on current and future measurements.

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