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## Spin Physics with Photon Beams

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Pion photoproduction and Compton scattering are powerful tools to precisely determine the nucleon structure, thus providing very stringent tests for all non-perturbative QCD models.

The different observables accessible using polarized photon beams and/or polarized nucleon targets play an essential role in this experimental research due to their enhanced sensitivity both to the individual resonances and to the deformation of the nucleon ground state caused by an incoming photon.

Despite of this, data on polarized observables are scarce in many channels, especially in those involving a neutron target.

A systematic measurement of these observables is being carried out by the A2@MAMI collaboration at the tagged photon facility of the MAMI-Mainz accelerator and for energies ranging from the pion production threshold up to 1.6 GeV. The large acceptance Crystal Ball/TAPS detection set-up is used for this purpose.

The present talk will give an overview of the wide range of polarized observables measured so far on different reactions together with a perspective on future experiments.

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