# Hadron Physics at ELSA

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Quantuum chromodynamics is widely accepted as the theory of strong interactions. At the moment, QCD is accessible in two major areas of momentum transfers. The strong coupling contributions of higher order terms are negligible at high momentum transfers. This allows the application of methods of perturbation theory. At low momentum transfers, chiral perturbation theory is used. In between these areas of interest, where the strong coupling constant has non-negligible values and where methods of perturbation theory do fail, the knowledge is small and few effects are understood. Therefore, it is necessary to first explore the relevant degrees of freedom and the underlying forces of interactions in this range of momentum transfers. An intense study of the excitation spectrum of the nucleon is a mandatory step to a better understanding of strong interactions. Using the Crystal Barrel and Mini-TAPS detectors combined as the CBELSA/TAPS experiment at the electron stretcher accelerator ELSA in Bonn / Germany, it is possible to explore in detail baryon resonances up to a center of mass energy of 2.5 GeV. Neutral meson final states can be well observed by the detector array, making use of CsI(Tl) (CB) and $BaF_2$ (TAPS) crystals. With an angular coverage of $\Omega \approx 0.96 \cdot 4\pi$ sr, and the high angular resolution of the detector, small cross sections can be determined with a high precission. A linearly and circularly polarized photon beam and a longitudinally polarized Butanol target are available at the site. This allows the observation of polarization degrees of freedom, such as the observables E and G. This is essential for the extraction of resonances out of the measured cross sections. This talk gives an overview on the current set-up of the CBELSA/TAPS experiment at ELSA in Bonn. The physics programme is presented and results from the series of CB-experiments at ELSA are shown.

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