

Crystal Barrel Detector at ELSA  
The new TRANSREGIO-Project

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The existence of the electron stretcher ring ELSA at Bonn with up to 3.2 GeV electron beams has provided the possibility to investigate the hadronic structure of nucleons with electromagnetic probes like photons and electrons. Since 5 years the photon detector Crystal Barrel and the TAPS detector as forward detector with its high rate capability have build a nearly 4 pi solid angle detector for the neutral decay channels of excited barium resonance's. First analysis has show, that further experiments with polarized targets and polarized photons are necessary to solve ambiguities in the solution provided by different theoretical models . A new long term project TRANSREGION TR16 was started to upgrade the accelerator , the detector and the target setup for double polarization measurements in the energy regime up to 3.5 GeV. The present status of the upgrade and the planned new detector components will be described in full detail.