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Hadron Physics Opportunities at ELSA

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The ELSA electron accelerator at Bonn university, Germany, has a long record of contributions to hadron physics with electromagnetic probes, electrons up to 3.2 GeV beam energy and photons from bremsstrahlung conversion including polarization degrees of freedom. In particular, the experiments (currently the BGO-OD setup and CB- ELSA/TAPS) allow to measure across the baryon spectrum. An up-to-date account of the status will be given elsewhere [J. Hartmann, this workshop]. This presentation will introduce the planned experiments utilizing an improved setup around the recently upgraded Crystal Barrel calorimeter. The high-resolution endcap setup of the planned PANDA experiment at the future FAIR complex is close to completion and will soon be available for experiments in Bonn, where it will replace the TAPS BaF calorimetry of photons in forward direction. Additionally, high-resolution tracking close to the interaction point of the photon beam with the liquid-hydrogen target and forward spectroscopy program can be extended into the strangeness sector, where results are still sparse and first experience has already been gathered in previous setups, recently with BGO-OD. Details on the status of detector commissioning, plans and ideas for the physics program will be given.

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