

SPIN AT COSY AND BEYOND

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Hadron physics aims at a fundamental understanding of all particles and their interactions that are subject to the strong force. Experiments using hadronic probes bear the potential to shed light on open questions that address the structure of hadrons and their interaction, as well as the symmetries of nature. The COoler SYnchrotron COSY at the Forschungszentrum Jülich accelerates protons and deuterons with momenta up to 3.7 GeV/c. In combination with internal polarized Hydrogen and Deuterium targets, the availability of electron and stochastically cooled polarized proton and deuteron beams allows for precision measurements. The talk will highlight selected recent results from the ongoing spin physics programs at the COSY facility using the ANKE, WASA, and TOF detector systems. Spin physics projects reaching into the future, such as the quest for polarized antiprotons, and searches for permanent electric dipole moments of protons and deuterons will be discussed as well.