Hadron physics experiments in antiproton proton reactions with the planned PANDA detector

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Fundamental questions of the strong interaction are addressed by the PANDA experiment using antiproton beams and proton as well as nuclear targets at the future FAIR facility at GSI-Darmstadt. The physics program at PANDA covers a wide range of topics including gluonic excitations, spectroscopy of strange and charm mesons, Drell-Yan and CP violating processes. PANDA will be a universal detector of modular design optimized for the specific kinematics of the antiproton-nucleon annihilation process with fixed target kinematics. This contribution focuses on the part of the physics program dealing with antiproton proton annihilation. A short review of proposed studies together with the status of the detector design and ongoing R&D will be presented. An overview of the antiproton nucleus physics will be presented in the contribution by O.Hartmann [1].

[1] O. Hartmann, contribution to this conference

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