

The PANDA Experiment At FAIR

The PANDA experiment in preparation to be setup at FAIR (Facility for Antiproton and Ion Research) in Darmstadt, Germany will cover many important aspects of hadron physics with cooled anti-proton beams of unprecedented intensity and precision in the momentum range between 1.5 and 15 GeV/c. The versatile detector is designed to address a rich physics program. This includes spectroscopy of QCD bound states ranging from charmonium to states composed of light quarks only, which comprises studies of the recently and yet not understood X, Y, and Z states and searches for other exotics. Production of hyperons will shed further light on the strong interaction in the intermediate region between the perturbative and non-perturbative regime. Time-like nuclear form factors and properties of hadrons in medium will be accessible and round up the experimental program. In this talk aspects of the PANDA physics program will be highlighted. Major components of the detector are under construction. The current status of the experiment will be presented.

Summary

Primary author: ANDERSSON, Walter (Uppsala University (SE))

Presenter: ANDERSSON, Walter (Uppsala University (SE))