

The detector of the PANDA experiment at FAIR

Friday, 15 September 2017 10:00 (30 minutes)

The PANDA experiment is the main hadron physics addressing experiment of the future FAIR (Facility for Antiproton and Ion Research) center at Darmstadt, Germany. Located at the HESR antiproton storage ring the PANDA detector is optimized for physics of the strong and weak interactions in the charm sector, that is search for new and exotic states of matter, precise determination of quantum numbers and line shapes of hadronic resonances and deeper insights in the structure of hadrons.

The detector consists of a target spectrometer build around the interaction region of the 1.5-15 GeV antiprotons with a fixed hydrogen target and a forward spectrometer in beam direction. Its design is based on versatility and compactness while achieving high resolution, rate capability and physics selectivity.

The presentation will cover the different vertexing, tracking, particle identification, and calorimetry subsystems as well as detector control and data acquisition.

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Track Classification: Future facilities and instrumentation