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Overview of the PANDA Detector design at FAIR

Wednesday, 9 September 2020 13:05 (25 minutes)

PANDA (antiProton ANnihilation in DArmstadt) is the central experiment to fully exploit the physics research potential of antiproton beams at the international accelerator Facility for Antiproton and Ion Research in Europe (FAIR), currently under construction at GSI. Phase-space cooled high intensity antiproton beams up to 15 GeV/c will be provided by the High Energy Storage Ring (HESR) at FAIR to interact with PANDA internal proton or nuclear targets enabling a broad range of exciting studies in Particle and Nuclear Physics. The PANDA detector features two spectrometers, the Target Spectrometer with a superconducting solenoid magnet of 2 T around the interaction region with hermetic coverage and the Forward Spectrometer with a 2 Tm dipole magnet for coverage of the forward boosted particles. Several modern particle detector systems are employed in PANDA to provide excellent charged particle tracking, particle identification, calorimetry and muon detection, over the full momentum range in both spectrometers throughout the lifetime of the experiment. Focusing on the various PANDA detector systems we present an overview of recent developments, the detector construction progress and conclude with an outline for a phased deployment of PANDA at FAIR.

Internet talk

Is this abstract from experiment?

Yes

Name of experiment and experimental site

PANDA at FAIR

Is the speaker for that presentation defined?

Yes

Details

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