9th International Conference on New Frontiers in Physics (ICNFP 2020)



Contribution ID: 72 Type: Talk

Physics Prospects of PANDA at FAIR

Tuesday, 8 September 2020 09:00 (30 minutes)

The PANDA experiment (antiProton ANnihilation at DArmstadt) is one of the four key experiments to be operated at FAIR (Facility for Antiproton and Ion Research), which is currently under construction near Darmstadt/Germany. This fixed target experiment will address a wide range of open questions in the field of hadron physics. The detector consists of at target as well as a forward spectrometer to fully exploit the forward boosted collisions of antiprotons with dense hydrogen or nuclear targets. Phase-space cooled antiprotons with momenta in the range of 1.5 GeV/c to 15 GeV/c provided by the High Energy Storage Ring (HESR) allow for high precision line-shape scans. The ability to perform exclusive reconstruction of arbitrary final states enables a physics program including topics such as spectroscopy in the charmonium and open-charm region, proton structure, and hyperon and hypernuclear physics. The talk will give an overview of the PANDA experiment and highlight the most important aspects of the physics program.

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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