



ID de Contribution: 33

Type: **Poster**

## Software Developement of PANDA barrel DIRC

*jeudi 6 mai 2010 10:00 (1 minute)*

The PANDA experiment at the future facility for anti-proton and ion research (FAIR) at GSI, Darmstadt, aims at studying the strong interaction by precision spectroscopy. A detector system with excellent particle identification (PID) properties over a large range of solid angle and momentum is therefore mandatory. For the charged hadron identification in the barrel region, a compact ring imaging Cherenkov detector following the DIRC (Detection of Internally Reflected Cherenkov light) principle is foreseen. The realization of the barrel DIRC is done in PandaRoot framework. The result of simulation in barrel DIRC using Monte Carlo transport code (GEANT) and realistic digitization implementation using the information of photon detector will be presented. Possible reconstruction methods based on likelihood approaches and correction methods of chromatic dispersion using fast timing techniques will also be discussed.

**Please indicate "poster" or "plenary" session. Final decision will be made by session coordinators.**

poster

**Auteur principal:** Dr DUTTA, Dipanwita (GSI, Darmstadt, Germany)

**Orateur:** Dr DUTTA, Dipanwita (GSI, Darmstadt, Germany)

**Classification de Session:** Poster Session 2 (Summary)

**Classification de thématique:** Pattern recognition and data analysis