Contribution ID: **285** Type: **Talk**

# First Particle Identification with a Disc DIRC Detector

*Wednesday, 13 February 2013 09:00 (20 minutes)*

The PANDA experiment at the FAIR laboratory, currently under construction at GSI in Darmstadt, Germany, requires excellent Particle Identification for its study of proton-antiproton reactions in the few GeV energy range. In the confined space of the PANDA Target Spectrometer, two RICH-type Cherenkov detectors mainly aim at pion-kaon separation: a Barrel-DIRC detector patterned after the BaBar-DIRC covering the central angles, and a Disc-DIRC detector for the forward theta angle range from 5 to 22 degrees. Such a Disc-DIRC design has not yet been used in production experiments.
A demonstrator prototype, one quarter segment scaled to 80 percent of the PANDA geometry, constructed at Giessen university and equipped with 480 sensor pixels, has measured particles of several GeV/c in a cocktail secondary beam delivered by the T9 test beamline at CERN in October 2012. First analysis of the recorded hit patterns will be presented, compared to simulations and discussed.

## quote your primary experiment

PANDA

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**Session Classification:** Cherenkov Detectors