Subject: PID-TOF subgroup meeting GSI December 2008 Posted by Carsten Schwarz on Mon, 24 Nov 2008 11:44:26 GMT

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Dear colleagues,

the PANDA-collaboration meeting at GSI approaches and there is a PID-TOF subgroup meeting at Monday, Dezember 8th, at 14:00h in the KP3 seminar room (SB3 4.161).

If you cannot attend the meeting, there will be the possibility to join by EVO, the password will be fasttiming

If tou intend to give a presentation, please, tell me the time needed and the title.

Although the PID-TOF takes care about forward and target spectrometer, the main topic is this time the barrel TOF implemented either as RPC or scintillator counter. To remind you the requirements from the PANDA wiki page (http://panda-wiki.gsi.de/cgi-bin/viewauth/Tof/WebHome):

Finding the detector requirements from the physical program is the task of the PID-TAG group. See there for details.

Timing information for the target spectrometer is helpful for PID and for cleaning up of events. For the first an excellent time resolution in the order of 100 ps is needed, while for the latter a relaxed timing resolution of about 1 ns is sufficient.

The material budget should be kept as low as possible in order not produce too many electron showers. Theses showers deteriorate the electron-pion separation capabilities of the EMC. The barrel DIRC has an (perpendicular) radiation length of 17% and causes in forward direction up to 30% of showers. 50% of these showers can be identified in the DIRC itself by detection of ambient light in addition to the directed Cherenkov photons. These numbers indicate a upper threshold of the TOF material budget of 10% and less.

My best regards, Carsten Schwarz