

Minutes of the TITAN Meeting

Held on the 18th of March, 2010

Present: Maxime Brodeur, Thomas Brunner, Paul Delheij, Jens Dilling, Stephan Ettenauer, Aaron Gallant, Ernesto Mane, Spencer Pasieka, Matthew Pearson, Martin Simon, and Vanessa Simon

RFQ

- With a DC transmission of 80 %, Thomas and Ernesto reached a new DC transmission record with Cs133 @ 20 kV. The difference in amplification between the two F/cups remains an uncertainty for the transmission value.
- Ernesto and Stephan spoke with Daryl about the switch box for the deflector plates in front of the RFQ. Daryl does not understand either why the rise time is slower than expected. A list of tasks to resolve the issue was identified and will be carried out in the next weeks.
- The RFQ training program for Ernesto is almost completed. From this, Ernesto will write a manual for the RFQ.
- Thomas and Ernesto have found that the beam can shoot over the RFQ trap in case the flow of buffer gas into the RFQ is not sufficiently high. This might explain why we had such a high dose above the RFQ during the Cs-beamtime.

EC-BR

- The LeGe was warmed up in the beginning of Jan. When it was cooled down now, the signals do not look as they should. When Thomas contacted Canberra, they recommended to undergo another warming&cooling cycle. If this does not help, the detector needs to be shipped to Canberra.
- One of the preamps for the PIPS is broken. Thomas brought it to the electronics group and it might be possible to repair it.

EBIT

- Martin reported that over the last weeks they managed to reach an electron beam current as high as during last year's operation (200 mA).
- Although the EBIT had performed smoothly before, a beam instability led to contamination of the cathode and the beam was lost again. This highlights that an (hardware) interlock should be put in place as soon as possible!

CPET

- It will be difficult to get the large amount of feed-throughs for the CPET. So, Vanessa will order them asap.
- Vanessa has completed the design of the electron injection/ion extraction drift tube, which has also been confirmed by simulations. Mel is currently working on the drawings. Vanessa will show the final drawings and simulations to Jens.

- Spencer completed the field measurement of the CPET magnet. It appears that the field axis is off by 2-2.5 mm in respect to the bore axis and that there is an angle between them.

MPET

- During the cooling process after baking the MPET, a leak opened between the tube and the ring with the feed-throughs. The screws were very relatively loose and by tightening them the leak could be closed. After a second baking cycle the leak opened up again, but could be closed a second time. We decided to put the MPET back, but will skip the initially planned in-situ baking as the vacuum is already good enough for this year's measurement. However, it will be necessary for the future. The screws are still not completely tight.
- Max pointed out that, in case the Daly detector won't be installed it will be necessary to either use the electrodes of the Daly to guide the ions to the MCP in the cross or make a longer MCP holder to have the MCP directly after the electrodes.
- The PS for the PostMPET electrodes have arrived and have been equipped with CANBUS controllers. Next week, Rod will integrate the new supplies into EPICS which will require a reboot of EPICS.
- The chassis for the old and the new PS got a hardware interlock installed (previously the interlock was only in software).