

## **Minutes of the TITAN Meeting**

Held on the 13<sup>th</sup> of November 2007

**Present:** Jens Dilling, Maxime Brodeur, Thomas Brunner, Christian Champagne, Paul Delheij, Melvin Good, Nikolina Ilic, Alain Lapierre, Ryan Ringle, Vladimir Ryjkov.

### **RFQ**

\*Maxime went over the 400 V limit for the RF DC, which 'knock-off' the power bar on which the RF DC power supply is plugged. It does not seem to have damaged anything else.

\*The RF DC bias will be software limited to 400 V to prevent such thing from happening again.

\*Regarding the H<sub>2</sub> safety, there is no need for a H<sub>2</sub> dedicated exhaust line. A valve will be installed on the nuclear exhaust line to help purge the H<sub>2</sub> out.

\*Mel will get the H<sub>2</sub> bottle (lab 4) by the end of this week.

\*There will be a need to look at the RFQ pulse drift tube because since the spark that occur before the last run, one cannot run the drift tube above 50 Hz (used to run at 1 kHz). This is not urgent and one can look at it when we will install the 60 kV switch.

### **MPET**

\*We have to try lower kicking voltage out of the RFQ because it seems that the ions are getting more scattered by the current 100 V kicking voltage than the previous 10 V voltage.

\*Going to lower kicking voltage will spread out the pulses; but it should only spread them to about 500 ns, which is fine because we use a low trapping voltage and can tolerate pulses up to 10 us long.

\*We will check if the space charge of the ion in the trap changes the energy of the ejected bunches. This will be done by varying the length of the gate that is loading the RFQ and checking the variation of the time delay on MCP0. Possibly, we are only capturing the tail of the distribution...

\*We also want to optimize the beam optics and we have to make sure that these settings remains constant as the MPET injection parameters are quite sensitive to beam optics settings.

\*Now the EPICS setting can be saved into MIDAS.

\*Nina finished the circuit for the gain control circuit. The parts for the board diagnostic detector will be ready this week.

\*The 4 RF amplifier will be ready for the 14<sup>th</sup> of December.

\*The Daly detector is plan to be installed in January 2008 as well as the Y-box (this should be a 3 weeks job).

## **EBIT**

\*We received the ceramic pieces.

\*The plan for the EBIT is the following:

- Assemble the trap electrode.

- Make sure that they don't spark by testing them under vacuum.

- Install the electrodes in the magnet bore. Align them with the bore.

- Align the magnet bore with the EBIT vacuum chamber and the EBIT beam line.

\*The drawings for the ion source test stand are finished.

\*Dave is working on the HV platform.

\*The EBIT electrodes power supplies will be connected to EPICS.

\*Mel looked at Chris' RFA drawings and sent them to the machine shop.

\*Chris is having some problems with his SIMION simulations.