Minutes of the TITAN Meeting

Held on the 15th of July 2008

Present: Maxime Brodeur, Thomas Brunner, Christian Champagne, Paul Delheij, Stephan Ettenauer, Melvin Good, Alain Lapierre, David Lunney, Ryan Ringle, and Savanna Shaw

RFA measurements:

Last weeks measurements were done without the drift tube after the RFQ; this week's measurements with the drift tube. There are problems with the drift tube power supply: The number of ions is decreasing significantly over short periods of time (Christian saw a run with a decrease in ion number of a fifth within ½ hour). When the power supply was turned off and turned on again the energy of the ion was different than before.

All these measurements were done with beam energy of 1 keV. At 3 keV the problem still persists but it is not as strong. [Note: In the measurements taken last week (without the drift tube) the number of ions was stable.]

It could be a heat issue, but similar problems were observed during MPET measurements in April when temperatures outside were not too warm. Possibly, the stability of the power supply is not very good (although instabilities are quoted as less than 0.05 % per 8 hours).

<u>Plans:</u> Check if a power supply with better stability can be borrowed. In case that the problems with the power supply cannot be solved, the measurements will be continued without the drift tube.

Switch:

The broken switch was replaced by a 20 kV switch.

MPET:

Starting in the week of July 28th the MPET will be prepared for measurements.

To allow faster switching the pulse drift tube in front of the MPET the resistor of the RC circuit controlling the switch will be changed. This will result to rise times of 1 ms (compared to currently 10 ms).

EBIT:

The vacuum system in the EBIT beam line was commissioned and the vacuum in the EBIT is expected to be commissioned within the next two weeks.

The switch yard power supplies will be installed in the beginning of August.

X-ray measurement could be done as soon as EBIT is commissioned as Be is present from the Cathode and does not require an injection of ions (probably 2nd week of August).