

Minutes of the TITAN Meeting Held on the 9th of March 2009

Present: Jens Dilling, Paul Delheij, Alain Lapierre, Mel Good, Maxime Brodeur, Thomas Brunner,

EBIT

- Alain was conditioning the electrode during the weekend. He will try to increase the electron beam current (100mA@4kV) to improve injection and increase the X-ray counts.
- Switch to switch e-gun during injection/ejection is in place.
- Alain will follow up with Daren concerning the prototype of the switch.
- Hubert needs to be asked to build more Behlke switches
- Alain will talk to Stu and France to push the construction of the test ion source.
- Thomas is working on storage time determination and the behavior of a Ge detector in the B-field.

MPET

- Max and Stephan talked to Pierre to reduce the noise of the module. Pierre will take the module to his lab to test it in a controlled environment.
- The 41K/23K ratio is not true for the MPET
- Idea to compare a mass 43 molecule to 41K
- Heavy ions are very sensitive to the capture timing, so this needs to be looked into.
- For measurements, one could use three AWG to clean out the sample in the MPET

CPET

- Paul will work out a document with requirements for the CPET to hand to the accelerator division for their simulations. These are
 - CPET needs to be transparent to be able to shoot ions through.
 - Injection into CPET to cool ions before ejecting them towards the EBIT for spectroscopy.

- Emittance out of the EBIT is 15-20 π mm mrad. A factor of 2 should be added to be conservative.
 - SimIon simulations of the CPET are needed to determine maximum acceptance.
 - Position of the proton source needs to be determined after simulations are done.
- Mel did drawings of the new beam-line setup. Jens brought up the idea to install the CPET on rails to make it movable out of the beam-line. The possibility of this will be evaluated by Mel.
- Gerald was supposed to send Alain a field map of the CPET magnet.
- Mel can work on the holding structure until the number of lenses is determined.