

## **Minutes of the TITAN Meeting**

Held on the 24th of March 2009

**Present:** Jens Dilling, Maxime Brodeur, Thomas Brunner, Paul Delheij, Melvin Good, Alain Lapierre, Ryan Ringle, Mathew Pearson.

### **RNB09 conference**

\*Need to discuss about the conference arrangement this week (next week will be rush).

### **Beamtime**

\*We have discretionary beamtime until Monday evening

### **EBIT**

\*The switchyard bend is an energy selector, so we need to optimize it for the  $m/q$  we want.

\*If we decrease the trap potential, we see an increase in the number of Na extracted.

\*Now we switch both the e-gun and collector front electrode upon ion injection.

\*Alain performed dipole RF sweep of ions in the EBIT and can have better resolution of the Na  $3+$  peak by getting rid of the nearby O  $2+$ .

\*Thomas got a fitting procedure of his peaks involving Gaussian and step functions in order to get efficiency curves.

### Plans:

\*Measure the efficiency as a function of the bending voltage

\*Properly decouple the TSYBL benders.

\*Increase the electron beam current up to 300 mA

\*Order some AFGs for the EBIT.

### **MPET**

\*The cause of the difference in settings between the 5 and 50 Hz repetition rate was studied.

\*One can recover the 5 Hz settings if decreasing the RFQ PB5 voltage by 4-10 V when going at 50 Hz. This is counter intuitive as one should expect to increase the PB5 voltage if the difference was caused by the pulse drift tube not fully recovering after 20 ms.

\*The RFQ PB5 as being the cause of this change was discarded by looking at the arrival time of the bunch for 5 and 50 Hz rep. rate on MCP0. The bunch arrive at the same time for both rep. rate, while changing the voltage on PB5 leads to a noticeable change in TOF.

### Plans:

- \*Perform a Li-6Li7 mass measurement at 50 Hz to see if everything is fine.
- \*Run the system at 100 Hz in case we get some Be-14 in descent amounts.

### **CPET**

- \*There will be a meeting with Gerald on Thursday and Friday concerning the CPET
- \*The titanium tube is in the machine shop.
- \*The magnet is cleared to be sent.
- \*Ryan shown from simulation that the LS, as drawn, will not work. Possibilities to consider: move it closer to the axis; used and hollowed source.
- \*Mel is working on the concept for a railing system to move the CPET laterally from the beamline if servicing is needed.

### **RFQ**

- \*The electronics guys are done with the reverse extraction PPG programming.