Minutes of the TITAN Meeting

Held on the 19th of January, 2009

Present: Maxime Brodeur, Paul Delheij, Jens Dilling, Stephan Ettenauer, Aaron Gallant, Melvin Good, Alain Lapierre, and Ryan Ringle

EBIT

<u>water leak:</u> Collector is fixed. EBIT is currently cooling down and magnetic field can be checked later in the afternoon. A complete start-up is planned for tomorrow. Alain presented an explanation for the water leak and Mel explained how he fixed it. <u>injection-ejection</u>: It is planned to see if the beam is injected on center into the EBIT.

MPET

The optimization of the electric field corrections continued with dipole excitation which is most sensitive to field imperfections, in particular on the width and on the amplitude of the resonance. Maxime presented plots for both parameters from which he extracted the optimal settings. Scans through different Lorentz steering seems to confirm the settings: a shift in the center frequency was observed but is thought to be due to the field decay. With these settings the following measurements were performed:

Li-6 is consistent with earlier measurements.

Li-7 versus Na-23 (with latter as the reference) shifts the Li-7 value in respect to the SMILETRAP value and a mass dependent shift was estimated to be 0.5ppb/u Li-7 versus K-39 is currently under way.

Since Li-7 also requires relativistic corrections, it might be useful to do Na-23 to K-39, too.

Next plans: Try to improve signal to noise ratio.

RFQ

Ryan presented the timing sequence for reverse extraction.

Matt might want to have two species in the beam at the same time. We could inject into the RFQ from our ion source, too, but that requires the timing sequence to be changed and – after we have found a solution how to implement it exactly- also additional switches. Ryan will talk to Matt about this issue.

CPET

Conference talks with Gerald will be set up every second week.

DAQ: We have to decide whether we will need a second separate VME crate for the CPET. An alternative would be to run a second PPG in the crate of the MPET, which would mean that the two PPGs cannot run independently at the same time. Currently, we do not see a scenario in which they should run independently (For the test bench we could borrow a VME crate). Since we had troubles with the VME crate with the tig10 and the EBIT PPG, we should check if power stability is an issue if we run two PPGs from the same crate.

We need to talk to Pierre which way we would like to proceed.

Wien Filter are not under consideration right now

Action Items:

- x) EBIT: check if beam injection into EBIT is on center
- x) MPET: mass dependent shift, improve signal to noise ratio
- x) RFQ: talk to Matt about two species in trap for simultaneous extraction
- x) CPET: decision if we need an additional VME crate for the CPET
- x) Budget: list of items needed