

Minutes of the TITAN Meeting

Held on the 21th of April 2008

Present: Jens Dilling, Maxime Brodeur, Thomas Brunner, Christian Champagne, Melvin Good, Gerald Gwinner, Zunjian Ke, Ryan Ringle, Wei Shi, Mathew Smith, Vladimir Ryjkov.

RFQ

- *The 'Vladimir cup' is now installed on top of the faulty nipple. The vacuum in the switchyard section 2 hours after installation was $7.2E-9$ Torr (with all gate valves closed).
- *The MCP0 is still sparking when going above $V(A) = 1700V$, $V(B) = 1900V$.
- *The beam was tuned at 1 keV beam energy, $HV(RFQ) = 28$ kV.
- *Total jitters are 5-8 mV for 30 mV amplitude pulses.
- *The RFQ was operated at 1, 20 and 100 Hz and no sensible change in the jitters were observed.

MPET

- *Max & Vlad will perform systematic measurements using the Li6-7, Na23, K39 beam from the ion source. The first test will consist to see if the measured cyclotron frequency depends on the number of ion in the trap. Purpose: try to explain the non-linear dependence in 'mass dependent' shift.

Beam time preparation

- *The observed yields are: 600 000 Be-11, 25 (!) Be-12, knowing that the previously observed, 'book' yields are: 2 000 000 Be-11, 3 000 Be-12. The proton current is 40 uA.
- *The Be-12 yields are non-optimized, but we cannot expect them to go up by more than a factor of 3 to 5.
- *Our target for this run: get to measure Be-12 at low yield.
- *Suggested preparation for low counts rate includes:
 - Deeper trap (20 V)
 - Higher rep rate (50 Hz)
 - Go at higher beam transport energy (2 keV)
- *Freidhelm said that we can have both C-12 and N-14 OLIS beam for the run.

Coller Trap Status

- *Magnet to be fired up.
- *Depending on the budget, the cooler trap may have to be tested using HCI from TITAN's EBIT.
- *The whole trap structure design drawings are ready to be sent to the shop.
- *Testing setup will include both electron and proton cooling scheme.