## **TITAN General Meeting**

### Date: Thursday Aug 09, 2007 Time: 15:15 Chairperson: Jens Dilling Minutes recorded by: Cecilia

Present: Jens Dilling, Paul Delheij, David Lundy (from ISOLDE), Mel Good, Mathew Smith, Ryan Ringle, Vladimir Ryjkov, Maxime Brodeur, Alexei Bylinskii, Alain Lapierre, Thomas Brunner, Christian Champagne, Cecilia Leung

#### **General Announcements:**

1. Fri Aug 10 1:00pm scheduling meeting

- Asked Jean-Michel for 2 more days of Li-beam. Prefer Nov or Dec
- 2. Beam time start Fri morning in 2 weeks (following B-NMR)
  - all beam days fall on days with proton cancer therapy, no beam to ISAC for 4 hrs.
  - need commissioning documents (RFQ ready, MPET beamline wait for approval, MPET need to obtain) & safety documents (for TITAN).
  - end of target's life. Will do Li-8 or Li-9 first. Can crank up to 75  $\mu$ A at later date.
- 3. Next 2 weeks, Mon/Wed/Fri quick meetings at 9:00am. (starting Mon, Aug 13)
  before Mon, prepare checklist of what tasks are left prior to beam time

#### RFQ:

- Set up gill switch. Generating pulses- split atoms before MPET

- Open RFQ on Monday- snip capacitor, if doesn't work, reconnect again. FIRM deadline: ready by 5pm Monday

- Making new 500 V cables

 silicon detector is below 10<sup>-7</sup> (up from 10<sup>-10</sup> yesterday) leak test shows not leaking. RGA determined predominately H2O. Right now at 2x10<sup>-8</sup> & still going down. Will leave over weekend.

- PLAN = fix, deliver beam through (MCP at the end of) MPET

-Need put in cable from penning for acquisition.

- For now, using 5kV transfer energy.

Suggest start with lowest transfer E (1kV). Should be no problem for switching.

- Decided to stop ISAC beam when taking reference measurement

- For beam gate, investigate what ISAC offers? Computer control or manual?

### **MPET:**

| - Hopeless trying to make e- beam ionization work<br>need gate for time of flight spectra |
|---|
| - Magnetron excitation- peaks   |
| e- beam generated = too large $\rightarrow$ Ion cloud = large                             |
| Aperture cuts into ions inside trap.  |
| Since initial conditions poorly defined, t.o.f. measurements meaningless.                 |
| - 300 turbo died. Warrantee does not apply to pump crash?                                 |
| Send pump back for investigation.   |
| Dents from inside therefore nothing fell in   |
| Got replacement pump from Dimo.   |
| Chamber condition should return to $5 \times 10^{-9}$ by Monday.                          |
| - PLAN: by Mon or Tues, 1kV Li- beam deliver to MPET                                      |
| - Brian Lee install remote RF generator by Monday   |
| Should have remote control over MIDAS parameters by beam time                             |
|   |
| - Data Acq. system developed at ISOLTRAP not compatible here.                             |
| Right now generate time of flight histogram, but useless for actual run.                  |
| - Data Acquisition:   |
| For each step, MID files records TOF data, convert to data file (takes 5sec)              |
| Ultimately, link TOF to map frequency   |
|   |

# **EBIT:**

| - 3 small bellows from Sikler lens housing damaged. Shop fixed                     |
|--|
| - Dan started working on frame for EBIT ion source (need 2-3 weeks)                |
| Also building cable for Geranium detector  |
| - Controller for EBIT power supply installed, now commissioning.                   |
| - Switching modules- ready in 2-3 weeks  |
| - Franco decided Dan will do detector design prior to ion source structure design. |
| Both same priority, same amount of work  |
| - put table in same REA as test ion source?  |
| - Thomas: played with PIPS & source last week                                      |
| Know & understand signals. Like how they looked $\textcircled{S}$                  |
| - Controller has been rebooted. System going up/down.                              |
| Look into implementing "prompt" before allowing to reboot.                         |
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