

Minutes of the TITAN Meeting

Held on the 2nd of October, 2009

Present: Maxime Brodeur, Thomas Brunner, Paul Delheij, Jens Dilling, Stephan Ettenauer, Aaron Gallant, Melvin Good, Ernesto Mane, Matt Pearson, and Vanessa Simon

Laser spectroscopy beamtime

- During the beamtime fluorescences of ^{78}Rb were successfully observed for the ground state and the isomer. Unfortunately, no fluorescence for ^{74}Rb was obtained. For ^{78}Rb the background suppression due to the gating on the ions bunches from the RFQ worked very well.
- For the next beamtime, it is suggested to schedule OLIS beamtime before the online run to be better prepared for the run.
- To additionally test the system and to extract efficiencies, OLIS Rb beamtime will be scheduled next year as early as possible. (Matt will take care of that)
- Plan with results of this beamtime:
 - ISOLDE workshop: Ernesto will give a plot to Greg Hackman
 - for a conference proceedings
 - possibly also in Thomas' NIM paper about the RFQ

RFQ:

- Thomas will ask for Ar beam delivered from OLIS. This will allow performing more tests with the RFQ. In particular, the transmission efficiency with Ar will be of importance for the ^{48}Ar beamtime in December.
- Mel will replace the borrowed roughing pump in the RFQ section with the repaired pump.

MPET

x) New setup for trap

Daryl says that it will be difficult to develop fast switches in the 50 V regime as we would need them for the new trapping setup in which we would replace the PMC softdac modules with power supplies and fast switches.

As an alternative he suggested to use the amplifiers which we have already in place, but replace the softdac modules with a similar device with better performance. Daryl and Stephan will test the amplifiers this afternoon.

Jens suggested contacting the people at GSI who have developed this type of switches which are in use for other trapping facilities. Stephan will ask F. Herfurth about these switches.

x) Baking

The MPET baking at 60 degree Celsius was stopped last Wednesday and the pressure came down and stabilized at around $1.3 \cdot 10^{-9}$ Torr, which is significantly worse than it was before the baking started (around $5 \cdot 10^{-10}$ Torr)

But it turned out that the Residual Gas Analyzer which was running during the last days for monitoring purposes was a source of out-gassing. When it was turned off today, the pressure fell again (being currently at $7 \cdot 10^{-10}$ Torr), but it is still decreasing.

x) Plans

Bring back ^{39}K into the MPET and later set up everything for Cs.

EBIT

The motherboard of the EBIT computer is broken and the EBIT is, thus, out of commission. Rob will try to order a new motherboard. If this does not work, we will need to buy a new machine. Aaron will also ask Rob if he has another (old) computer which we could (temporarily) use.

CPET

Field mapping will start on Wednesday. Max mentions that the Hall probe drifts over time, so it is better to first measure the angular field distribution and then the one along the axis.

Paul put together a spec list for the CPET PPG:

<https://titan.triumf.ca/intern/documents/REAppgspecs20091102.pdf>

Please have a look on it and send comments to Paul.

Platform extension

The platform will be extended by 2 feet plus 1 additional foot around the MPET magnet. Constructions could begin already in November, but should better start in January after the December beamtime.

Mel suggested turning off the RFQ section during this work to prevent damage on the ceramic (and thus on the turbo pump).