Minutes of the TITAN meeting

May 6, 2010

Present: Jens, Ernesto, Mel, Paul, Max, Spencer, Benjamin, Vanessa, Aaron, Matt, Stephan, Thomas

First, Benjamin Eberhardt is introduced to the group. He will join the TITAN group as a Diploma student.

RFQ

- There are inconsistencies with resistors before the switch. Some U-R combinations result in good switching, some combinations result in bad switching signals. Ernesto tries to figure out a solution that works for a wide range of voltages.
- Ernesto plans to add a 50MOhm HV resistor for normal use of the switch to mimic the situation when the HV probe is installed at the output.
- Furthermore, he plans to investigate the effect of shorter HV supply cables.
- The total time for the switch tests is estimated to be about 2 weeks.

EBIT and SIS unit

- A FFT analysis of the SIS 3302 sampled baseline was performed. The recorded baseline appears to be noisier than the one sampled with the tig10.
- The e-gun is warming up and hopefully operational again next week.
- Aaron will work on the interlock system. Jens will help him with information on who he should talk to on site for support.
- Mel is working on the plasma ion source as a side project. He knows about the latest idea to mount the source on the side of the tower.

TITAN-EC

• Thomas presented the status of the data analysis. There is no time drift visible in spectra taken with the dspecs. Also splitting the LeGe signal had no effect on the counts in the spectra.

CPET

- On Monday, there will be a TRIUMF review on CPET. Vanessa will present a talk about the scientific overview and Gerald will present insight into the funding.
- Vanessa reports that NEG coating might be problematic to bake. The WITCH project reported that their coating vanished during baking with 300-350 degC.

- The recommended baking temperature quoted from GSI is about 220 degC. More data points in the baking temperature vs. vacuum graph would be helpful.
- The vacuum specialist at GSI also recommended using Al-Capton foil instead of pure Capton foil.
- Vanessa will list missing parts left to order for CPET.

MPET

- Spencer helps Stephan with the cleaning of vacuum parts.
- The trap is aligned again. Mel is confident that the alignment is restored within 5-10 tau in the horizontal plane and within 0.5 mm in the vertical plane.
- Dali detector and optical elements are cleaned and installed inside the vacuum chamber. The chamber pumped down to the low 10e-8 region over night.
- Baking of the vacuum chamber started. Right now the temperature is at 100 degC and will be ramped up to about 200 degC.
- Stephan is on vacation for the upcoming two weeks. Max will monitor the baking process during this time and Mel will fill the MPET magnet.
- For the upgrade of the trap structure, 2 parts are still in the machine shop. As soon as Stephan returns the assembly of the trap will continue. The estimated time to finish the MPET assembly is 1 week.

MISC

Jens asked every student to present the status of their talk at the TITAN collaboration meeting. Each presentation will be about 10 mins long. Spencer will present the results of the field mapping.