



Minutes of the 26th CTF3 Committee

Thursday 26th May 2011

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Participants at CERN:

A. Andersson, R. Bononi, P. Burrows, A. De Giovanni, S. Verdu Andres, R. Corsini (Chairman), S. Doebert, W. Farabolini, G. Geschonke, A. Grudiev, J. Kovermann, G. McMonagle, K. Schirm, P. Skowronski (secretary), F. Tecker, M. Divall, I. Syratchev

Participants via EVO:

L. Sanchez, A. Faus-Golfe

Excused:

J-P. Delahaye, G. Riddone, W. Wuensch, G. Montoro, F. Toral, R. Ruber.

1. Comment on Minutes of the 23rd CTF3 Committee:

Minutes of the previous meeting were approved without any comments.

2. Collaboration news (R. Corsini)

- a) The UK – CLIC Collaboration kick off meeting was held on the 12th and 13th of April. It was very useful to better focus and to define several projects, including the drive beam phase feed-forward system to be developed by Oxford/JAI and tested in CTF3.
- b) The last Collaboration Board was held on 19 May 2011.
 - Roberto Corsini presented the status of CTF3 and CLIC work packages for the next 5 years.
 - Hermann Schmickler presented the status of CDR.
 - There was a discussion on the future organization of the Linear Collider community after the ILC GDE will end its mandate, which will happen together with the delivery of Technical Design Report for ILC. Initial ideas are to bring together under a sort of common overall coordination both ILC and CLIC communities, including physics and detector, and to strengthen the mutual collaboration, while retaining at least in an initial phase their individual organization.

3. Presentation of Frank Tecker on “Status of CTF3 Operation, update of experimental program and schedule for 2011”

<http://indico.cern.ch/materialDisplay.py?contribId=6&materialId=slides&confId=140863>

Comments/Questions:

- a) Q: Which acceleration structure is currently in use in TBTS? A: It is the same as the previous year, re-tuned to the proper frequency. It was verified that the structure is still in tune after installation by frequency analysis of the field induced by the CALIFES beam. A new structure is in the pipeline, also equipped with HOM damping slots, but still without damping material.
- b) Following a suggestion by Gerry, it was agreed to have winter shutdowns of adequate length in order to guarantee enough time for careful check-up of modulators, and hence minimize risk of an accident.

4. Presentation of Steffen Doebert on “TBL planning”

<http://indico.cern.ch/materialDisplay.py?contribId=6&materialId=slides&confId=140863>

Comments/Questions:

- a) The next batch of PETS tanks could be installed with gaps in between. New generation PETS with input/output coupler could be installed later in the gaps, in order to prepare TBL for a role of RF high-power testing facility.
- b) Q: How do we want to use the movers? A: Movers are not essential for TBL operation. They will be used mainly to verify procedures for efficient beam setup, as needed in the CLIC decelerators: Dispersion Free Steering, 1-to-1 and other methods.
- c) During installation time in CLEX a PHIN run will be made, since the laser and klystron will not be used by CALIFES. PHIN is not ready at the moment because cathode is not yet ready. Additionally, some other equipment still needs to be installed.

5. Summary on Status of X-band klystron and high power test stand by Gerard McMonagle

The pressure in the klystron went to the atmospheric level. The leak was repaired, but the measured perveance was still too low. Detailed examination showed that the cathode is significantly misaligned. The situation is very difficult.

6. Gerard McMonagle and Silvia Verdu Andres on “Proposals for CTF3 modifications, new installations or experiments (TERA S-band cavity conditioning and BDR measurements)”

Comments/Questions:

- a) The RF network is ready to deliver power to CTF2 from klystron 14 or 30. The waveguides are passing over klystron 7, which need to be temporally stopped in order to

perform the final connections. This can be done in few week's time from now. 6 weeks of potential running will be divided equally between PHIN and TERA.

- b) Faraday cups shall be installed for breakdown measurement. We should have spare ones that could be installed.
- c) ADC cards shall be used rather than oscilloscopes. 3 fast channels are needed to measure:
 - 1. RF input
 - 2. RF output
 - 3. Faraday cup
- d) Control of frequency: it would be desirable to have it in order to tune RF to the cavity, following eventual temperature changes. Not clear if it would be possible. Otherwise, the achievable temperature stability of the cavity should be assessed.
- e) The measurements should start on beginning of September.
- f) Roger Ruber will check with his collaborators the impact of pausing TBTS activities in the first weeks after the CLEX installations are completed, in order to concentrate on studies with freshly installed equipment in TBL.
- g) Marta suggests to run PHIN before modifications are made, so new development will not interfere with installation of the new laser.

7. Round table + AoB

P. Skowronski