

WP 16 Video Meeting

Date: 28.11.2019

Time: 15 to 16 p.m.

Hosted by: CERN (A. Rossi/S. Sadovich)

Invited: A. Rossi, S. Sadovich; P. Apse-Apsitis; O. Meusel, M. Droba; S. Artikova, D. Ondreka

Participants: A. Rossi, S. Sadovich; P. Apse-Apsitis; O. Meusel; S. Artikova, D. Ondreka

Indico-Page: <https://indico.cern.ch/event/865925/>

1 Modulator: Status

(Presented by P. Apse-Apsitis)

The modulator is ready for basic tests with sufficiently low voltage at IAP. However, some technical issues need to be solved before the modulator can be used with voltages in the kV range on a platform. In particular, the control of the modulator is an issue, since an insulated connection needs yet to be established. RTU and IAP will discuss possible solutions.

RTU also has problems with measuring high voltage signals on the output of the modulator with the required bandwidth due to lack of adequate equipment. IAP offers to provide RTU with an appropriate HV probe.

2 TE²: Status

(Presented by O. Meusel)

A new Bachelor student, Julian Rausch, has joined the electron gun team.

After reconfiguration of the TE² device, the cathode is presently heated. A measurement campaign is foreseen for next week:

- High resolution temperature measurements
- Repetition of previous experiments with new spacers

Apart from the work on the device itself, safety procedures for operation of TE² at higher voltages in the bunker are under preparation.

A first low voltage test of modulator and TE² is tentatively scheduled for January 2020. In order to prepare the test, IAP will send an installation sketch and a rough schedule to RTU by the end of next week. (**Action:** O. Meusel)

Tungsten cathodes and grids for additional TE² devices have been ordered. Delivery times are such that completion of the second, modified TE² device for the CERN test stand can be expected around March 2020. An updated schedule will soon be developed and provided to CERN (see below).

3 CERN Test Stand: Status

(Presented by A. Rossi/S. Sadovich)

CERN has performed tests with the HEL gun. Certain issues make modifications to the test stand necessary. In order to develop a schedule for both the tests of TE² at the CERN test stand and the modifications of the test stand itself, CERN needs a tentative schedule for the manufacturing of the modified TE² device for the CERN test stand from IAP. IAP will send such a schedule to CERN. (**Action:** O. Meusel)

4 Next Events

The next meeting will be a video conference on Thursday, 16.01.2020 at 3 p.m.

Low voltage tests of TE² with power modulator are tentatively scheduled for January 2020.