



## Minutes, CLEAR Politburo

14th February 2022

**Members:** E. Adli, R. Corsini (President), S. Curt, S. Doebert, D. Gamba, W. Farabolini, L.A. Dyks (Secretary), A. Malyzhenkov, G. Mcmonagle, K. N. Sjobaek, P. Korysko, J.J. Bateman, C. Robertson

**Absent:** E. Adli, S. Curt, J.J. Bateman, C. Robertson

### Agenda

1. Status of the Winter Shutdown
2. Experiment Planning

## 1 Machine status and planning

The meeting began with Pierre running through the updated list of shutdown actions sent to the group. The full details of each action can be found on the Indico page.

- The new quadrupole has been connected to power converter and cooling. Anthony will come this week to finalise the connection. The interlock cable needs to be increased in length and connected. The Alignment has been done, but this should be checked again once the installation has finished.
- The pumping group on the new section of beam pipe has been removed and the area cleaned ahead of the safety visit. A new location for the CLIC structure needs to be decided.
- There was a meeting with the Cherenkov BPM team. It was decided that the iBPM will in fact be rotated, but will only be done when they install their setup.
- No updates on the soft X-ray experiment.
- Bergoz have said that the ICT will be sensitive to the quadrupole field so will have to be tested before the Manchester VHEE experiment.
- The optical fibre BLM has been installed close to the beam pipe, passing through the centre of several magnets. Sara is coming towards the end of her PhD so the beam test should be done before June.

- No update on the uniform beam scatterer.
- The photocathode will be renewed on the week beginning 21st February.
- The rotating filter for the robot camera is now fully implemented in all sections of the code. The laser cutter will be used to cut a new PMMA plate to hold additional samples, up to 31.
- Jose is working on the synoptic for the vacuum system, which will be ready soon.
- The new chairs have arrived in the control room. Also the new keyboard and mouse have also arrived.
- A meeting was held with Bergoz. In the meeting they asked if they would be able to test a new wall current monitor in-air in the next few months. A preliminary test should be fine, although Roberto will check with KT about further commercial tests.
- No progress on the calibration of the of iBPMs.
- There was some discussion in the meeting about what electrical accreditation will be needed by operators. It was decided that all of the CLEAR OP team who deal with installation should complete a STELH02 Electrician low voltage. Gerry will further clarify the situation in a future meeting.

## 2 Experiment Planning

- Most of the early part of March will be used for beam commissioning.
- One of the first users will be CHUV who will arrive at some point during March or April.
- As mentioned previously, the Cherenkov BLM experiment should be completed before June.
- The R2E groups would like to complete further tests, although they have no concrete proposals currently.
- The focused VHEE team from Manchester will travel to CERN towards the end of March or the start of April. A date needs to be confirmed.
- The plasma lens group will visit to complete further experiments with their setup in the Autumn.
- The CLIC BPM team will arrive at some point in early summer, to be confirmed later.
- The proposed dosimetry studies from the Canadian team will need to be discussed further.
- There has been a proposal to use low energy electrons for treatment of exhaust gases, which will be discussed further soon.
- It was noted that any new experiment should complete a need beam time request form. Furthermore, experiments that have been completed should complete a beam feedback form.

## Actions

- **Wilfrid:** Provide an update on the installation of the temporary quadrupole.
- **All:** Complete the calibration of the inductive BPMs.
- **Wilfrid + Pierre:** Prepare for the refurbishment of the photocathode with Eric Chevallay.
- **Pierre:** Continue work on the improvements to the robot. **All:** Provide updates to potential experiments and circulate any new requests.

## Long-Term Actions

- **Wilfrid:** Work with the vacuum group to consolidate the vacuum systems.
- **Davide, Kyrre + Wilfrid:** Decide the way forward to deal with the phasing out of the Oasis cards currently used on CLEAR.
- **All:** Investigate ways of logging beamtime data.
- **All:** Investigate ways of collecting operational statistics in a more systematic way.
- **Wilfrid:** Follow up with the drawing department and gain an idea of the costs of necessary improvements to the beamline diagrams.
- **Roberto:** investigate the collaboration request from INFN.
- **Roberto:** Meet with Edu to discuss future work needed for the laser and to discuss the feasibility of higher than 10 Hz operation.

It was decided that there should be a politburo meeting every Monday, at 9 am until the beginning of operation. An Indico page will be set up to store the minutes and other Politburo documents.

**Next Meeting: Monday 31st January 2022**