

# LHC RF Meeting

15th July 2009

**Participants:** Andy Butterworth, Daniel Valuch, Edmond Ciapala, Frederic Dubouchet, Frode Weierud, Joachim Tuckmantel, Luca Arnaudon, Wolfgang Weingarten, Vittorio Rossi, Wolfgang Hofle, Olivier Brunner, Erk Jensen

## 1. UX45 status

- ✚ The cooling water is back on, and will remain so until all tests are finished. Tests foreseen: Eric for the ADT electrode polarities and John for LLRF.
- ✚ Sector 3-4 will be cooled down first, with 4-5 cold by the end of August.
- ✚ The short circuits are still installed on waveguides; they will not be taken out before the end of August. Low-power measurements to measure cavity Q will be done from the end of the WG, no pieces will be dismantled.

## 2. ADT

- ✚ **Abort gap cleaning:** No advance since last time since Gerd is occupied finishing his PhD thesis. He should be finished in about 2 weeks.
- ✚ **Electrode polarity checks:** Ongoing.
- ✚ **Driver amplifiers:** 3 driver amplifiers are broken; Frederic will test them in the lab to see if it is an interlock problem or a problem with a power supply in the amplifier.
- ✚ **Pickups:** No followup from BI yet.

## 3. Operational Dry Run tests:

- ✚ The Beam Control dry run was successful: the Synchro and Beam Control systems were set up for injection using the LSA sequencer.
- ✚ TI2 and TI8 tests are planned for Week 34 (22nd August).

## 4. SPS Low Level

- ✚ **Rephasing:** some problems were seen this weekend. A bug with playback mode in the DSP still needs to be ironed out. The Frev dropped out on LHCFAST on Sunday evening even though the system had run correctly until then. This seems to be linked with the cycle being used, which has an intermediate flat top.

## 5. Mountain range

- ✚ Michael has started to make a dedicated Mountain Range application in Java, based on OASIS. It will allow simultaneous control of the scopes and the VTUs.

## 6. Software

- ✚ **Role Based Access Control:** The switching of RBAC to strict mode has been put back to 29th July. Roman has provided RBAC tools for LabVIEW. These have been tested in SM18 with RBAC on the front-ends, and found to behave correctly. Logging in enables Setting of properties, which is disabled otherwise. The RF-Expert role is managed by Andy & Frode. The different modes OPERATIONAL/NON\_OPERATIONAL could not be tested, as we are waiting for the new CMW version to be deployed by CO.


## 7. SM18

- ✚ Cavity 21 has finally been recovered by conditioning. It is just above specs but not excellent.

## 8. AOB

- ✚ **Vacuum chamber alignment:** during the DG's visit to Point 4 he commented on the fact that one section of vacuum chamber next to the cavities gives the impression of not being correctly aligned. This is well known since the installation. It should maybe be checked with the vacuum group.
- ✚ **Access during powering:** The dangerous situation is during the Phase 2 powering test, where there will be no access in machine, but we should have access in UX45. This is not specifically

mentioned in Magali's document, and should be corrected. Olivier will bring this to her attention.

 **LHC Consolidation:** (S. Baird) Some budget is available for spare equipment. A justification is required (risk analysis). Possible items are: spare cavities, klystrons, spare electronics. Ed will send a link to the form to the people concerned and we will make a request towards the end of August.

A. Butterworth, 16th July 2009