LHC RF Meeting 26th April 2007

Participants: Maria Elena Angoletta, Luca Arnaudon, Philippe Baudrenghien, Olivier Brunner, Andy Butterworth, Edmond Ciapala, Pierre Maesen, Eric Montesinos, Wolfgang Höfle, Joachim Tückmantel, Daniel Valuch, Frode Weierud.

1. P4 RF Commissioning

- **Water:** The water cooling systems are running steadily All problems have been repaired and there are no leaks.
- **ACS power tests:** Blowers, focus and heater supplies have all been tested for all klystrons. Power tests are being done four klystrons at a time. The first power converter has been taken to 10 kV. This will be increased, a spark gap is in place in the bunker while these initial tests are in progress.
- **ACS Coupler mechanics:** The coupler mechanics have been installed on all cavities and electrical tests are in progress.
- **ACS:** Pressure tests and flushing will start soon. There are still some leaks to repair in the warm recovery line. We urgently need to get the final word from SC on the release valve settings.

(Action: Ed)

- ♣ **ADT:** The complete system is being checked right through, one kicker assembly at a time, using the four out of 16 amplifiers which have been completed. The first anode converter has been switched on and taken to 8 kV. The other necessary equipment to power the tetrodes has been checked and RF tests have already been done on two of the amplifiers. Measurements have also been done on the complete chain for these two positions. The frequency responses agree well with those expected.
 - **APWL:** Ground connections have been made. We are waiting for news on bakeout.
 - **Vacuum equipment:**
- **Electron stoppers.** These are still in the central workshop but we understand that they are nearly ready.

2. ACS Modules, Couplers and SM18

Module 4 (Europa): The module is in the bunker and connected up. We need the conditioner electronics from AT-CR. However if they are not available we can start tests with our own material.

3. SR4:

Cabling work for ADT: TS-EL services have been reserved for September to do the needed cabling. We have till then, <u>at the latest</u>, to finalize the cabling lists. Luca will check the completed cable lists. The situation regarding connectors also needs to be checked. (J-C Perrier). There are roughly 100 inter-rack cables to install.

Daniel will present the layouts of the ADT low level and diagnostics systems in a forthcoming LHC RF meeting.

4. LLRF:

Series Production of modules: Around 100 VME modules have been delivered soon. This includes ~ 70 clock distribution modules which will now be tested. We also have 25 RF front end modules. We will have to organize the manpower for testing, and we will probably need extra short-term FSU support.

Next Meeting: Thursday 10th May at 08:45 in the JBA room. **Special Topic:** Damper LLRF and diagnostics layouts – Daniel.