LHC RF Meeting 18th December 2008

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1. LHC planning

- Parts of the straight section between IP4 and the arc will be opened. A bakeout will be necessary afterwards, but the vacuum group will avoid opening sectors next to the ADT pickups etc. if possible.
- **4** According to the current planning:
 - cooldown of sector 3-4 mid-June
 - helium available for sector 3-4 cavities mid-end July
 - Sector 4-5 cavities will have helium earlier but must wait until all SSSs are installed and the roof closed. This will be sometime in May at the earliest.
- In the event of the sector 3-4 modules showing poor performance in June (due to possible contamination), the scenario would be either to take out the 2 modules of Sector 3-4 immediately for cleaning, or to leave them in and take them out during next shutdown. However, these modules were 7 or 8 subsectors away from the accident zone, and they were running and continued to run throughout the incident, so they would seem not to have any problems.

2. Tuner repairs

- 4 All tuners have been disassembled, and several faults were found:
 - \circ a number of lock screws on the motor mechanism were loose
 - \circ about 10% of the cables were seen to be bent, but only 1 was broken
- 4 A few additional cables are needed to complete the installation.
- There is a good margin in cable strength over the force required: 20kN is needed for cavity extension, and with a mechanical advantage of 14 this brings us to about four times below the 5kN cable strength.

3. Other activities in UX45

- ↓ Vacuum cleaning of UX45 to remove dust build-up.
- The air conditioners for the Faraday cages will be modified: if the chilled water supply is lost, the system will stop recirculating and fresh air will be taken from the cavern. This should be capable of stabilizing the temperature at about 5 degrees higher than normal. There will still be an interlock which cuts the cage power on over temperature. The installation will start in January and be finished in March.

4. ADT

4 The series of DSPU cards has been received.

5. SM18

4 Connection of the LHC 18kW IP1 cryoplant is expected for February.

6. Beam diagnostics

- **4** There is a request from OP to have a beam quality monitor for LHC in 2009.
- Mountain range: OASIS does not seem to be the right tool for a permanent fixed display due to the middle tier connection management which allows clients with a higher priority to take control of the acquisition channel.
- ↓ The VTU FESA class has still not been delivered by the CS section.
- A. Butterworth, 19th December 2008