

LHC RF Meeting 17th December 2003

Present: Luca Arnaudon, Andy Butterworth, Edmond Ciapala, Wolfgang Höfle, Trevor Linnecar, Volker Rödel.

Excused/Absent: Philippe Baudrenghien, Olivier Brunner, Thomas Bohl, Elena Chapochnikova, Roberto Losito, Eric Montesinos, Joachim Tückmantel, Daniel Valuch.

The meeting was devoted to the UX45 layout.

Agreed points:

- 1) We will move the LLRF racks to the klystron side of UX45, to an area just behind the level of the TX45 tunnel opening.
 - The actual loop delays for each klystron must be checked. The maximum MUST be less than 600 nS. **(Action: Philippe)**
 - We should prepare the technical reasons for the change (mainly: drastic reduction of radiation single event upset due to existing shielding wall, together with possibility to add additional movable shielding blocks) as an ECR **(Action: Andy, Volker)**
 - We should contact the design team for the platform on the cryo side to see if any unnecessary expenditure can be avoided. **(Action Volker, Ed)**

Points to be studied:

1) Design of a Faraday cage – Look at commercial ‘of-the-shelf’ solutions, e.g. Siemens and possibly review the number of racks per ring for LLRF/common timing and the layout of crates in racks. **(Action: Philippe)**

2) Moving of two HV bunkers to opposite side of UX45:

Advantages: symmetry, additional radiation protection for other equipment racks which would then be arranged behind bunkers nearer PZ45, shorter HV cables for the two moved bunkers?

Disadvantages: routing of HV cables past TX 45 opening, additional water piping, additional earthing. **(Action: Olivier, Volker)**

AoB.

- The confirmed level for the power applied to all four couplers during the recent tests on module 3 is 300 kW.
- Module 3 was successfully leak tested after the power tests.

Next Meeting:

7th January 2004 at 09:00 in 864-1-C01

E. Ciapala, 17th December 2003.