

Minutes of the 9th FOM meeting held on 16.03.2010

Agenda:

- 1) Follow-up of the last meeting (K. Hanke)
- 2) Status of the machines (Supervisors)
- 3) Schedule (K. Hanke)
- 4) Special topics: Technical stop activities in PS complex
- 5) AOB
- 6) Next agenda

1. Follow-up of the last meeting

The minutes of the 8th FOM meeting were approved.

Follow-ups from the last FOM:

- a) Concerning the technical stop activities, see the machine reports and the special topics.

2. Status of the machines

Linac2 (A. LOMBARDI):

The Linac2 had a good week. The intensity fluctuations of the source could not be solved yet. The technical stop activities were completed without particular problems.

PSB (K. HANKE):

The PSB had a good week.

On Wednesday, the extraction kicker started to trip quite often. The repair took about 2 hours and a half, during which operation was perturbed.

On Thursday, the LHC was stopped; setting up of beams continued.

On Friday afternoon the ring4 kicker was disabled to measure it's impedance. The kicker was put back into operation on Monday. The intervention was coordinated with the other users.

The beams were stopped on Monday at 5:00 AM for a 3h radiation cool-down requested by RP before the technical stop interventions.

All the technical stop activities were proceeding according to the schedule. The water leak mentioned during the last FOM of 3 m³ per week could be identified and repaired.

PS (G. METRAL):

The PS had a good week.

All LHC-type beams were stopped on Monday at 5:00 AM for the technical stop. All non-LHC beams were stopped already on Friday at 18:00 to allow for radiation cool-down during the weekend.

During the week, a problem with the GFA controlling the radial steering was identified. A few times every day, the radial steering at extraction on the LHC beams is not executed. This causes an energy shift which in turn causes bad synchronisation with the SPS. CO will follow the problem.

Studies are ongoing to understand the Bfield fluctuation from cycle-to-cycle observed on the LHC beams. Up to 4 Gauss of Bfield shift have been observed depending on the composition of the super-cycle. The FMR has been put back in operation to obtain an independent measurement of the Bfield since the classical Bfield measurement apparently does not recognise the field error.

The field error is, in fact, observed by variation of the beam radial position. The variation is compatible with the few Gauss Bfield error observed by the FMR.

Frequent problems with the access video signals appeared during the week. In particular, there was a problem with the door D701.

J. Hansen mentioned that a vacuum leak has been found on a flange of the slow extraction electrostatic septum SEH23. The leak is stable since several weeks, but the vacuum level will not allow the ion run. Moreover, there is no guarantee that the vacuum will not degrade. It is not possible to spray some varnish to fix it since there is a high risk to contaminate the septum electrodes. The intervention to fix the problem will take two working days, during which the PS has to stop. It would be wiser to do it as soon as possible, i.e. before the start of the physics.

K. Hanke will identify a slot for the repair.

SPS (D. MANGLUNKI):

The SPS had a good week. The LHCPROBE and the LHCINDIV were delivered regularly whenever requested by the LHC.

On Wednesday the setting up of the transverse damper was done on 12 bunches spaced by 50 ns on the MD2 cycle. After this, the setting up with 36 bunches started. This beam was used for e-cloud studies on the afternoon and evening of the same day.

The beams were stopped on Monday at 5:00 AM as scheduled for the technical stop.

Four water leaks were found in the tunnel, three of which could be repaired on situ.

Most of the activities scheduled for the technical stop have been concluded.

There is still a problem with the video of the CNGS access system. The image is transmitted with a delay of 5 seconds. The patrol was not lost yet, but this constitutes a safety issue. K. Hanke will follow-up the problem with the responsible of the access system. K. Kostro mentioned that there is a similar problem with the LHC access system.

CTF3 (G. MCMONAGLE):

G. Mcmonagle gave an update on the fire in the Faraday cage of last week ([link](#)). The fire originated from the Pulse Forming Network of one of the RF modulators. The damage was limited to the Faraday cage. The Fire Brigade tried to extinguish the fire first by using CO₂. Unfortunately, the fire came back after the closure and the re-opening of the RF modulator door. At that point, the use of the powder, water and foam were necessary to cool-down the hot surfaces and extinguish definitely the fire.

The powder as well as the burnt material caused the chemical contamination of a lot of equipments. The cleaning already started and will take about 4 weeks.

CTF3 will not restart before 6-8 weeks from now.

Some of the parking space around the CTF buildings has been reserved for the cleaning company responsible for the different interventions.

TI (P. SOLLANDER):

Nothing special to report.

LHC interface with injectors;

No representative present.

3. Schedule / Supercycle / MD planning

The 2010 schedule (V1.5) is available at:

https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/2010-injector-schedule_v1.5.pdf

The CNGS works are ongoing. OPERA will be ready to take beam starting from the 29 April.

E. Metral mentioned that the SPS RF will need regular maintenance during the next months. As mentioned to E. Metral by E. Montesino, four blocks of two days will be necessary during the year for the necessary works. The time for these interventions will be shared between normal operations and the MDs. There will be a meeting with M.Lamont, H.Breuker and K.Hanke to identify time slots.

E. Metral mentioned that the UA9 experiment will take data during the physics time in the SPS and not during the MDs. In total, the experiment will run for 5 days of 24 hours.

All planned interventions are available via the on-line agenda:

<https://espace.cern.ch/be-dep/FOM/Lists/Agenda/calendar.aspx>.

4. Special topics: technical stop activities in PS complex

S. Gilardoni presented on behalf of R. Brown the final list of the activities ongoing during the technical stop. The detailed list is available [here](#).

All the activities are proceeding as foreseen.

Following the doubts on the PS orbit, the alignment of four magnets was checked, showing no difference with respect to the last measurements. R. Brown will check the presence of eventual current leaks on the MU57.

5. AOB

6. Next meeting

The next meeting will be held on Tuesday, 23 March at 10:00 in 874-1-011.

Preliminary Agenda:

- 1) Follow-up of the last meeting
- 2) Status of the machines
- 3) Schedule
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- 5) Next agenda

Minutes edited by S. Gilardoni