Minutes of the 38th FOM meeting held on 18.10.2011

Agenda:

1) Follow-up of the last meeting (K. Hanke)
2) Status of the machines
3) Schedule (K. Hanke)
4) AOB
5) Next agenda

1 Follow-up of the last meeting

The minutes of the 37th FOM meeting were approved.

Follow-up from the last FOM:

Pending actions:

Status of the PS-Bfield fluctuation with POPS

The action is on hold since POPS is not operating. Action not closed.

2 Status of the machines

LINAC2 ():

A. Lombardi communicated by e-mail that there had been no issues.

G. Rumolo reported the following issues:

There was an intervention to fix the main switch, which powers the second buncher rack (1 h downtime).

On Sunday there were two vacuum alarms in LASER. The vacuum piquet was called to restart the pumps. An intervention in the Linac is needed to check the cables and pumps.

PSB (G. Rumolo):

The PSB had a very good week with a total downtime of 5 min.

On Wednesday night the PSB could send the LHC50 beam to the PS because of a problem with the synchro frequency sent by the PS.

Work was done on the LHCPROBE beam to bring it back into specifications. A clone of LHCPROBE was done on Friday.

The piquet power had to intervene to restart the power supplies of some sextupoles.

The 100 ns beam for proton-ion collisions was ready on Wednesday afternoon and sent to the PS.

Numerous emittance measurements have also taken place during the week.

ISOLDE (E. Piselli):

A radiation alarm occurred in the HV area, which was solved by decreasing the intensity of the beam. J. Vollaire said that it is expected when the tungsten convertor target is used, and it is OK since no access can take place when there is beam. The threshold had already been raised.

On Saturday at 18:18 the connection to RAMSES was lost and was thought to be a control issue. A. Bland said that he was not aware.

ISOLDE users (M. Kowalska sent an email before the meeting):

"Since Wednesday evening the HRS target was used for physics (suppressing contamination with quartz transfer line, neutron converter and laser ionization). First, ISOLTRAP measured for the first time the mass and half life of 82Zn, relevant for astrophysics. On Saturday decay-spectroscopy started on 82,81,80Zn and in spite of some problems with lasers and Rb contamination, the studies have been very successful so far. Both groups appreciate highly the work of the ISOLDE support, especially the target and RILIS teams. Now, REX setup will follow and a Miniball run on 72Zn will start on Thursday evening.

GPS, molten lead target will be used with STAGISO beam for 10 experiments on solid-state and bio-physics. The run will start on Tuesday/Wednesday and will finish on Monday morning.

From Thursday evening until Monday morning GPS and HRS will share protons. The molten lead target is anyway limited in pps and in total p intensity, so it will be limited to 0.15uA. The remaining protons will go to HRS. The request of a possible GPS+HRS intensity up to 2uA was already communicated to R. Steerenberg. More than 2uA should not be necessary,"

E. Siesling said that the proposal to run during LS1 was abandoned as there were too many clashes with HIE ISOLDE installation work. The plan is now to run ISOLDE from 19th Nov to 5th Dec 2012. K. Hanke said that it needs to be checked that all support would be available.

A. Bland said that there is a need to redo the insulation in the CCC building in autumn 2013, which will affect many servers. He added that some subsets of servers will be moved. This can be a problem for TI and CTF3. K. Hanke said that serious coordination is needed and it needs to be discussed at the IEFC.

PS (A. Grudiev):

It was quiet running.

The 100 ns beam is ready. An intensity lower than 1e10 p/b has been set up by the RF team.

On Tuesday the bumper PE.BSW16-14 was pulsing at the wrong value and causing losses at extraction. The piquet power changed a power supply.

On Tuesday evening there was a connection fault with a radiation alarm, which required stopping the TOF beam for 12 h.

Again, several 10 MHz cavities needed resets and specialist interventions (in particular C51, C81 C76).

East Area (E E. Gschwendtner):

It is fine.

East Area Users (H. Breuker):

CLOUD is trying to get ready for beam next Monday. Some instrumentation is missing and it is proposed to start with one spill and then to go back to the usual 3 spills

TOF (H. Breuker):

It is fine.

AD (B. Lefort):

It was a stable week without problems.

AD Users (H. Breuker):

Users are nervous about the AEGIS run coming up (start is planned on 31st Nov) as a lot of equipment is still missing.

ASACUSA fully installed all equipment for the antihydrogen program.

SPS (Y. Papaphilippou):

It was a good week.

On Tuesday, the piquet power was called for a main power convertor fault. The ventilation problem was solved the next day (1 h downtime).

On Wednesday evening, the piquet was called to fix injection kicker delays.

On Thursday an access was organized in CNGS in parallel with the MD to repair the movement of the shielding plugs. A burnt power supply was replaced.

On Saturday morning the chain 11 tripped again, and the piquet access changed a PLC. It tripped again today, and could be reset. This is a recurrent problem.

During the weekend a lot of sparks occurred in the ZS. It was decided to lower the voltage on the ZS and now the ZS is conditioned with users and LHC so that there is no need for a dedicated filling.

The piquet power changed a card for one of the septa for CNGS and LHC (2 h without CNGS beam).

North Area (E. Gschwendtner):

There is an active program in North Area and COMPASS.

In H4 a current reading was wrong but it had no impact since the real current was correct. The wrong reading was fixed. Work is ongoing for the door that is causing trips to chain 11.

During a patrol, one of the magnet measurements stopped and this is being followed up.

North Area users (H. Breuker):

The room is filled with people.

CNGS (E. Gschwendtner):

The “bouchon” was repaired. The muon detector is being prepared. An access was organized last week through point 8. A meeting will be called.

Following the recent OPERA measurements, CNGS requested to use preferably the 150 ns beam or if not possible the high intensity single bunches from 4 rings in the Booster. However, S. Hancock reminded that the LHC150 user was replaced by the 100 ns user after the LMC agreed to suppress the LHC150. For the PSB, it would be OK, but in the PS S. Hancock said it might be possible to rebuild the LHC150 only for the end of next week after H. Damerau is back. E. Gschwendtner said that this was probably too late. G. Rumolo pointed out that the other possibility (LHCINDIV with 500 ns spacing) requires 4 rings of the PSB with high intensity, while only ring 3 is set up with high intensity. A. Findlay said that I should take 2 days to set up the LHCINDIV with high intensity on the 3 other rings. A meeting will be organized to clarify the request and the specifications for this beam.

CTF3 ():

No report.

TI (P. Sollander):

Nothing special to report.

LHC interface with injectors (M. Lamont):

It was good running. The 25ns MD went well and after that more than 1.45e11 p/b could be stored, but the head-tail instability threshold was reached, which was cured by raising octupoles.

S. Hancock asked about the status of the request for satellites as it would have repercussions, in particular corruption of the LHC 25 ns beam, and the need to go back to low intensity LHC 50 ns. M. Lamont replied that careful scheduling is required. Indeed, there is a plan for a 24 h 25 ns MD this Friday. The satellite request should then be discussed again at the next FOM.

IONS

LINAC3 (R. Scrivens):

Oven refill happened on Friday. A test was done changing the stripper foil, which unexpectedly yielded a 25% increase in intensity. One needs to understand what is going on.

Pressure rise was observed after the few oven refills. This has to be investigated when the machine stops.

LEIR (D. Manglunki)

LEIR restarted on Monday morning.

On Tuesday evening, the accumulation stopped on all cycles. Two electrodes of the electron cooler were intermittently giving lower voltages. It was a power converter problem and the Faraday cage needed to be consigned. The problem got better when running LEIR in scrubbing mode. The machine was stopped for 2 h to change regulation card on both the grid and control electrode power supply. It is however believed that there was sparking in the electron cooling system.

It has been working fine since and the MD yielded good results. The machine is put in scrubbing mode every night now.

LEIR was restarted after the end of the morning with very good performance.

PS (D. Manglunki)

It was noticed on Wednesday that the lifetime was degrading. The vacuum experts confirmed that the sublimation had stopped. The vacuum has improved now.

The recurring problem of the low beta quadrupole QD217 came back and an intervention is planned during the technical stop.

A vacuum problem was noticed with pressure higher than usual in SS84.

SPS (D. Manglunki)

At the end of the MD, 4 NOMINAL bunches with 100 ns spacing were produced after 30 min of set up.

Very good performance was obtained out of the SPS so that it discussed to use this beam (1.2e8i/b on single batch at flat top).

3 Schedule / Supercycle / MD planning

The 2011 schedule (V3.6) is available at:
https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/injector_schedule.pdf

In this new schedule, it should be noted that the technical stop was shifted to Tuesday.

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

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

Ions to NA61 should point in week 45 after “end of NA protons”.

The draft MD planning will need to be redone following the request of ion MD.

The preliminary list of interventions for the next technical stop will be discussed next week.

The MD should last until 8 p.m. on Thursday.

On Friday, ion set up for NA61 will be done. D. Manglunki that not many other users will be able to take beam that day.

4 AOB

F. Tarita said that major work will start on Monday morning during the LHC technical stop. This should however be transparent for all machines.

A. Bland said that several non essential consoles in the CPS and SPS isles will be moved from SLC5 32b to SLC6 64b, in preparation of the move of all consoles to 64 bit in the future. This should be transparent. However no development should be done.

5 Next meeting

The next meeting will be held on Tuesday, 18th October at 10:00 in 874-1-011.

Preliminary Agenda:

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2) Status of the machines
3) Preliminary list of interventions for the next technical stop
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Minutes edited by B. Salvant