Minutes of the 44th FOM meeting held on 16.11.2010

Agenda:

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

1. Follow-up of the last meeting

The minutes of the 43rd FOM meeting were approved.

Follow-up from the last FOM:

a) Status of the PS B-field fluctuations.
No news.

b) Mathematica Licences for the Tomoscope. A. Bland followed-up the problem with IT to negotiate the acquisition of 4 licences.
K. Hanke added that the FOM endorses the acquisition.

c) LEIR vistar status. M. Ludwig is following-up the problem.

The beam statistics can be found here.
A new web page with the accelerator statistics (beta version) is available here.

2. Status of the machines

LINAC2 (R. SCRIVENS):
The Linac had a good week.

There was some beam loss due to a timing distribution problem. CO was informed.

PSB (J. TAN):
The PSB had a good week.

On Tuesday the KFA20 had to be reset following a TG8 jitter.
The C16 of ring4 had to be reset once.

ISOLDE (E. PISELLI):
ISOLDE had a good week.

HRS and GPS were running very well with their corresponding maximum intensities.
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ISOLDE users (M. KOWALSKA, mail):

"[…]
- GPS users (development of RILIS scheme for astatine, which has no stable isotopes, running in parallel with HRS): extremely happy; GPS turbo pumps survived; laser-ionised astatine was observed: ionization optimization and yield checks for different isotopes performed.
- HRS users (laser spectroscopy on neutron-rich potassium isotopes) – happy: got still a good proton intensity even when sharing with GPS, measured very quickly less exotic K isotopes, but had some stable-beam background on 51K and could not measure this isotope
- HRS since today (trap-assisted decay spectroscopy on thallium isotopes): just starting.
[…]"

PS (S. GILARONI for R. STEERENBERG):

The PS had a good week.

The PS has been running well last week. There were some issues, but most of them could be solved rather quickly.
A few issues on the INCA side came up that caused some problems. Most of them are now understood and have been or will be solved this week.
On Tuesday morning the 80 MHz cavity used for ions (C80-08) could no longer hold its required voltage and tripped too often. It was therefore decided to retune on of the two 80 MHz cavities (C80-88) used for LHC proton beams (MDs) to the ion frequency. This stopped all parallel MDs on the LHC protons beams. However, the C80-88 also trips regularly and requires reducing the voltage. The specialist will check if there is not a systematic problem with the maximum voltage when these cavities are tuned to the ion frequency.
During the whole week the 4 LHCION cycles in the PS super cycle were very often requested, reducing severely the place in the super cycle for some other users, e.g. TOF and EAST.

Concerning INCA:
• A serious problem with the GFAS editor was discovered during MTE tests. The editor allows deleting the first vector shifting the entire function, causing serious problems. A fix has been applied to the function editor and will be deployed during the next release that is planned for the beginning of the week.
• The knob that allows delaying or multiplying the function did not work correctly either. For this a fix has also been found and will also be deployed in the beginning of the week.
• The trim editor (version as used in the LHC and SPS) cannot handle GFAS functions that contain internal stop. During the next release (beginning of this week) the trim history application dealing correctly with internal stop and all other parameters directly form the working set and knobs.

EAST AREA USERS (H. BREUKER):
Nothing special to mention.
As recently reported, the PS had more than 90% up time during the last year.

TOF (H. BREUKER):

Nothing special to report.

AD (P. BELOCHITSKII):
There were a number of problems during the week, starting on Tuesday evening. Irregular losses were observed due to a faulty trim dipole. The magnet was irregularly going to standby.

On Friday, two dipoles of the ATRAP line went off and the intervention of Firstline was necessary to solve the problem.

On Sunday, the main quadrupoles tripped. Firstline intervened but the problem was not related to the power converters but to a water leak (the same magnet which had leaked already twice in the last two weeks). In addition, an intermittent short circuit was occurring between a bake out jacket and a conductor. The two problems could be solved on Monday.

AD USERS (H. BREUKER):
The users are satisfied.

SPS (K. CORNELIS):
The SPS had a very good week.

On Wednesday there was an MD on the LHC150 ns beam and later on electron clouds.
Later the MD continued with the setting up of the NA61 magnetic cycle for the ion fragmentation tests, with some delays due to the LHC filling. The beam could be injected, captured and accelerated.
The restart of the physics was delayed by a problem with the power converters of TT20.

Later, the collimators of the H2 line had to be set manually due to a problem with the remote controls.

The weekend was very productive for the CNGS, reaching the record of 4 10^{19} pot.

Later, there was the UA9 run with ion coast. A fast blow-up of the transverse emittance was observed as for the protons.

CNGS (E. GSCHWENDTNER, mail):
"[…] Concerning CNGS everything is fine, we have achieved 4E19 pot Sunday night!! […]"

NORTH AREA Users (H. BREUKER):

The NA61 run will start next week.

In H4 and H6 there were two new users.

H8 will run for Totem.

CTF3:
No report.

S. Hutchins commented that the AUG tests taking place after the end of the run will take place during the CTF3 run. D. Manglunki added that the AUG tests should have been scheduled after the end of the CTF run. He will take care to inform the CTF3 colleagues about the tests.

LINAC3 (R. SCRIVENS):
The Linac was running without any problems.

There was a trip of the source due to a short circuit on the water interlock. The source of the short circuit could not be found yet.

After the oven re-fill, beam is expected by Friday.

LEIR (D. MANGLUNKI):

LEIR had a good week.
On Thursday, the intensity extracted was pretty unstable, with losses during the ramp. By Friday it was found that the problem was related to a bad contact plus a faulty wiring of the transverse damper control system.

The intensity delivered by LEIR was higher than the design one.

PS-IONS (D. MANGLUNKI):
Apart from the problem mentioned with the RF cavity, the PS had no particular issue related to ions. The high intensity delivered is also thanks to the excellent vacuum in the PS.

SPS-IONS (D. MANGLUNKI):
The SPS was very good.

The bunch intensity delivered was too high for the LHC as the emittance too small.

TI (P. SOLLANDER):
There was an electrical perturbation on Monday with no impact for the injectors.

LHC interface with injectors (M. LAMONT):
The LHC had a very successful run with ions. M. Lamont presented some slides about the ion run (available here) and congratulated the injectors for the run.

The LHC will take again protons to study the electron clouds between Wednesday and Friday.

3. Schedule / Supercycle / MD planning

Version 1.9 of the 2010 injector schedule is available at:
https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/2010-injector-schedule_v1.9.pdf

Proton operation will stop on Monday 22/11 at 8:00 AM.

The access piquet will be available also during the Xmas period.

The annual RP survey will take place on Tuesday 23/11 afternoon, immediately after filling the LHC. The survey will take three hours and will start tentatively at 14:00.

R. Scrivens will take measurements of the PS stray field the 6/12 after the end of the run. The measurements will start probably at 14:00 since the LHC will stop at that moment.

On 9/12 there will be a scheduled general power cut at 7:00 AM for five minutes. Here a reminder of the various electrical tests (mail from F. Tarita):

"Thu 09/12/10 at 07h00 :Test Secours General power cut all sites maximum 10 minutes.

Thu 09/12/10 to Mon 13/12/10 : Test Auto Transfer of powers sources. No power cuts expected except for the Meyrin site on Sat 11/12/10 (building 513 et administrative area excluded)

No pulses or power tests allowed and only manual emergency supply in case of external power failures. Team EN-EL-OP in Place or rapidly available."

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.

4. AOB

5. Next meeting

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

Preliminary Agenda:

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2) Status of the machines
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Minutes edited by S. Gilardoni