

Minutes of the PS-SPS Users Meeting held on March 30th, 2023

News from the PS & SPS Physics Coordinator (M. Jaekel)

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PS Machine Report (B. Salvant)

- Good progress of beam commissioning
 - nTOF set up last week.
 - Beam permit not signed until Friday by RP.
 - Patrol on Friday around lunch time.
 - First beam to target planned on Saturday at 10:00.
 - Focus on EAST beams and LHC beams this week
 - Setting up of AD next week
- Main issues
 - Several issues on RF cavities are being worked on by experts, most of them fixed
 - F16.BHZ377/378 are tripping quite often since yesterday. This is followed up by the experts.

SPS Machine Report (Please Add Your Name Here)

Safety / Radiation Protection (Please Add Your Name Here)

n_TOF (Please Add Your Name Here)

East Area Beam Status (J. Bernhard)

Hardware commissioning for all secondary lines finished successfully and now have received first beam on T09 and T10/T11 targets. First secondary beams seen in all lines with good quality and no particular issues. Concentrate now on beam instrumentation. Cherenkov issue for T10 seems to be solved, now being confirmed (most probably readout issue and was always ok for direct user readout / split signal). All on track to be ready for physics.

East Area Users Tour de Table

T8 Incoming: IRRAD / CHARM - Week 14 (F. Ravotti)

Beam sent to T8 since tonight (~1AM): preparation of SLOW and FAST beams (see Benoit's presentation). Monday April 3rd planned cross-calibration run for the T8 proton intensity with BI and activation-foil technique, this time including extraction region in F61 (see planning being finalized in these hours) that needs two short stops of the PS for accessing the F61 extraction area toward EAST. Rest of next week dedicated to other tasks planned for the T8 beam commissioning. Users are registering for both IRRAD and CHARM. We should start the exposure of "long" passive

samples in IRRAD from the Easter week-end. During the following weeks we will complete the beam and dosimetry downstream T8 and start with the active user experiments and equipment/components tests in IRRAD and CHARM.

T9 Incoming: PAN - Week 14 (Daniil Sukhonos, UNIGE)

We plan to perform the installation of our equipment on the 6th of April. A safety inspection is scheduled at the same day at 16:00. The test runs are planned on the 7th and 8th. The runs with 15 GeV/c hadrons are planned during the Easter weekend (8th-11th) for position resolution studies. Then we plan to install magnets and perform the position/momentum resolution measurements of our device with low momentum electrons/positrons (0.1 - 2 GeV/c) until the end of our beam time.

T10 Incoming: ALICE ITS3 (Paolo Martinengo)

DESY table will be installed Monday

Detector installation will follow

Lack of manpower for data taking (people from outside CERN)

AWAKE (Giovanni Zevi Della Porta)

Intense preparation for first proton run, starting on May 1.

The May proton run will be crucial for AWAKE to test a new plasma source, which has to be removed at the end of May. So the data taken in this run will be irreplaceable.

North Area Beam Status

General: All on track, TCC2 target cavern to be closed beginning of next week. Will start beam commissioning on April 17th with calibration of beam intensity monitors in front of production targets, then go through all the beamlines.

H2, H4, H6, and H8 Beams (B. Rae, N. Charitonidis, D. Banerjee, A. Baratto Roldan, M. van Dijk, J. Bernhard)

Hardware commissioning started, so far all ok.

Other Beams P42, K12, and M2 (D. Banerjee, J. Bernhard)

Hardware commissioning started, mostly ok. Found an issue with a misaligned vacuum chamber (so-called T4 VXSS chamber) that was hit by the primary beam towards P42. This is a good explanation for the degraded beam spot on the T10 target that was observed over the last years and had to be compensated by the optics. Verification will be done during beam commissioning. Should also help to improve beam quality in H6/H8 for electron beams, to be seen.

North Area Users Tour de Table

H8: MADMAX (P. Pralavorio)

The magnet is at 1.6 T since Friday 24-mar 12:00 in very stable conditions. Long run taken with the CB100 MADMAX Prototype booster at warm proceeding smoothly. Plan is to continue up to

Friday 14-Apr. Preparation of the area for the first test of a booster at cold (few days) completed.
The run will take place 14-19 April.

AOB

Minutes by the respective speakers, edited by E. B. Holzer, M. Jaekel, and M. Schwinzerl