

SPS							
Machine Coordinator last week		Verena Kain					
Machine Coordinator this week							
Beam Scheduled							
LHC	Yes/No	NA	Yes/No	AWAKE	Yes/No	HiRadMat	Yes/No
Beam Availability by Destination (AFT)							
LHC	%	NA	%	AWAKE	%	HiRadMat	%
Facility Status							
Summary	<ul style="list-style-type: none"> successful beam based alignment: 4 quads in H and 5 quads in V. RMS measured afterwards for LHC and SFTPRO as predicted. Excellent tools and ALPS system. aperture scan: vertical and horizontal. All similar to end of 2022. fast extractions: set up LHC, AWAKE, HiRadMat with single bunch extracted to TEDs. LHCPILOT to TI 2 and TI 8 TEDs with LHC mastership, LHC frequency for re-phasing, BQM and extraction bump interlocking enabled. Extraction setting-up info: LSS4 bump had to be slightly reduced to maximise aperture (not understood). LHC cycles prepared in terms of tunes and chroma for single bunch and orbit through cycle: LHCPILOT, LHCINDIV cycle with single injection and MD5 for multi-bunch (Laslett tune changes working). beam instrumentation checked: TT10 ALPS electronics qualified (several issues encountered and patched: e.g. with intensity spikes of MTE BB beam; one dead horizontal BPM in TT10 fixed, polarity inversion of last vertical BPM fixed), wire scanners set up (synchronised for slot 1 corresponding to bucket 1), several ring BPMs fixed as well after kick response measurements from last weekend. dampers set up for SFTPRO and LHC cycles. 800 MHz commissioned on Thursday to be ready for scrubbing. scrubbing: started to take 12 bunches on Wednesday. Scrubbing for real commenced Friday evening. MKP4 outgassing is driving progress. Temperatures on MKP4 are stable! 4x72 bunches Sunday evening (250 ns batch spacing, 1.4e+11 ppb, emittances 1.6 um at injection - 1.9 um at end of FB) other studies: successful ML algorithm test for tune denoising through cycle (1-2 measurements/clicks to correct entire cycle), successful test of Laslett-like incorporation of tune changes with intensity on fixed target (1 measurement/click to follow intensity change through entire cycle); preparation of accurate chromaticity measurement on MD cycle for power clamping EPC test next week; cavity voltage calibration and phasing check - analysis ongoing 						
Issues							
Plans	<ul style="list-style-type: none"> LHC injection: no beam before Wednesday find slot for pLHC module on SFT test for dampers (Gerd) test trajectory interlock (could not be done this week due to many issues with TT10 BPMs) set up slow extraction to TED scrubbing towards LIU intensities MKE6 waveform scan Slot for 800 C2 measurement after update of amplitude and phase (C1 done) 						
Intervention Request							
Yes	Duration	½ day		Preferred date/time	Before mid-May		
Reason	Inform survey team for BA1 tunnel access if opportunity						
Impact	No beam						