

LHC Performance Workshop 2017

Monday 23 January 2017

Introduction (08:30-08:45)

-Presenters: BORDRY, Frederick

Session 1: Lessons from 2016 (08:45-12:30)

This session will cover the conclusions/recommendations from Evian and the lessons learnt from the 2016 run

-Conveners: Roderik Bruce; Matteo Solfaroli Camillocci

time	[id] title	presenter
08:45	[2] 2016 operation: Operational efficiency and lessons learnt	NISBET, David
09:15	[3] Beams during the cycle: Quality and behaviour	LI, Kevin Shing Bruce
09:50	Coffee break	
10:20	[4] Colliding beams: Quality and behaviour	BUFFAT, Xavier
10:55	[5] Machine availability	APOLLONIO, Andrea
11:25	[6] Technical infrastructures analysis and perspectives	NIELSEN, Jesper

Coffee break (16:15-16:45)**Session 2: System performance (16:45-20:00)****-Conveners: Mike Lamont; Paul Collier; Chiara Bracco**

time	[id] title	presenter
16:45	[44] LBDS and injection kickers: occasional storms	DUCIMETIERE, Laurent Sylvain
17:15	[45] Are the electron clouds clearing?	IADAROLA, Giovanni
17:45	[50] Cryogenics: performance 2016	Mr. FERLIN, Gerard
18:10	Break	
18:25	[46] Cryogenics: perspectives	BRODZINSKI, Krzysztof
18:55	[51] Injectors: bright and improving	MIKULEC, Bettina
19:25	[47] Perspectives of magnet circuit performance for 2017/18	DENZ, Reiner

Tuesday 24 January 2017

Session 3: Operation performance optimization for run 2 (08:30-12:00)

- The sessions will cover operation and hardware performance challenges for 2017 and 2018. Topics to be presented include:

o Running conditions and key challenges for 2017 and 2018 operation, pushing (the limits) towards nominal conditions/parameters. It includes special runs, choice of optics ...;

o LHC and injectors hardware performance: Status on current performance and 2016 limitations, improvements for 2017 and 2018, impact of operational parameters on HW performance. The situation of TIDVG and injection kickers will be reviewed in these sessions. The TIDVG change decision will be taken before Chamonix workshop (LMC 2nd November)

-Conveners: Laurette Ponce; Paul Collier; Mike Lamont

time	[id] title	presenter
08:30	[7] Experimental requirements in 2017	BOYD, Jamie
09:00	[8] Baseline optics for 2017 and beyond	GIOVANNONZI, Massimo
09:30	[9] Levelling options (if needed)	FUCHSBERGER, Kajetan
10:00	Coffee break	
10:30	[10] MD priorities for Run 2	TOMAS GARCIA, Rogelio
11:00	[11] Putting it together: Machine configuration for 2017	LAMONT, Mike

Coffee break (16:15-16:45)**Session 4: Full energy exploitation (16:45-20:25)**

- *This session will review the limits in terms of energy, intensity and availability. It can include the following:*

- o Magnets training;*
- o Magnets operating at + 110A;*
- o Quench margins;*
- o BLM thresholds;*
- o Availability/Reliability at 7TeV and beyond, sensitivity analysis;*

-Conveners: **Andrea Apollonio; Oliver Bruning**

time	[id] title	presenter
16:45	[12] Summary of the LHC dipole magnet performance on the test benches including data from 2008 to 2016	WILLERING, Gerard
17:15	[13] Summary of the training campaigns and magnet quenches in the tunnel	LE NAOUR, Sandrine
17:45	[52] What to do if we detect a short-circuit during training? Actions	BEDNAREK, Mateusz Jakub
18:10	Break	
18:25	[14] Statistical summary and interpretation of the training campaigns	TODESCO, Ezio
18:55	[15] Summary of equipment components that might limit the choice of beam parameters and performance reach for operation at 7 TeV	POJER, Mirko
19:20	[16] Quench margins and BLM thresholds for operation at 7 TeV	APOLLONIO, Andrea LECHNER, Anton
19:45	[17] Potential performance reach (instantaneous and integrated, based on the presentations 1 to 5)	ARDUINI, Gianluigi

Wednesday 25 January 2017

Session 5: LIU / HL-LHC / LS2 (08:30-13:00)

LIU and HL-LHC common ground talks

-Conveners: **Malika Meddahi; Giovanni Iadarola**

time	[id] title	presenter
08:30	[18] HL-LHC beam parameters for protons	TOMAS GARCIA, Rogelio
09:00	[19] LIU baseline for protons	RUMOLO, Giovanni
09:30	[20] HL-LHC beam parameters for ions	JOWETT, John
10:00	Coffee break	
10:30	[21] LIU baseline for ions	BARTOSIK, Hannes
11:00	[23] Challenges for beam dumps and protection devices in LIU and HL-LHC	PERILLO MARCONE, Antonio
11:30	[24] Crab cavity in the SPS	CALAGA, Rama

Coffee break (16:15-16:45)**Session 6: LIU / HL-LHC / LS2 (16:45-21:00)*****LIU Talks*****-Conveners: Giovanni Rumolo; Giulia Bellodi**

time	[id] title	presenter
16:45	[25] LIU-ions for PS injectors status and outlook	HUSCHAUER, Alexander
17:15	[26] Linac4 status and perspectives	LOMBARDI, Alessandra
17:45	[27] LIU-PSB status and outlook	DI GIOVANNI, Gian Piero
18:15	Break	
18:30	[28] LIU-PS status and outlook	STERBINI, Guido
19:00	[29] LIU-SPS status and outlook	KAIN, Verena
19:30	[30] Safety aspects of LIU	VOLLAIRE, Joachim

Thursday 26 January 2017

Session 7: LIU / HL-LHC / LS2 (08:30-13:00)

HL-LHC talks

-Conveners: **Lucio Rossi; Daniel Wollmann**

time	[id] title	presenter
08:30	[31] HL-LHC: performance sensitivity to parameters change	PAPAPHILIPPOU, Yannis
09:00	[32] Can we simplify the correctors and magnet circuits for HL-LHC?	DE MARIA, Riccardo
09:30	[33] Review of the present non-conformities in view of HL-LHC	GIOVANNONZZI, Massimo
10:00	Coffee break	
10:30	[34] Vibration: is it still an issue?	FESSIA, Paolo
11:00	[35] Need for beam halo depletion in the HL-LHC and LIU era	REDAELLI, Stefano
11:30	[36] Collimation: is this a limitation, still?	BRUCE, Roderik

Session 8: LS2 Talks (14:00-17:55)**LS2 talks****-Conveners: Jose Miguel Jimenez; Jean-Philippe Tock**

time	[id] title	presenter
14:00	[54] Introduction	JIMENEZ, Jose Miguel
14:10	[43] Plan tool - status and next steps	FORAZ, Katy
14:40	[38] Planning of injectors in (E)YETS and LS2 (LIU, CONS and maintenance)	COUPARD, Julie
15:10	[39] Planning of LHC in (E)YETS and LS2 (HL-LHC, CONS and LHC maintenance, non-conformities)	BERNARDINI, Marzia
15:45	Coffee break	
16:10	[49] Cryogenics driven change during LS2	CLAUDET, Serge
16:40	[41] LHC experiments	PONTECORVO, Ludovico
17:10	[42] Non-LHC experiments	BRUGGER, Markus
17:40	[55] LHC forward experiments	LAMONT, Mike

Friday 27 January 2017

Close-out - 60-6-015 - Room Georges Charpak (Room F) (13:30-14:30)