

# **LHC Performance Workshop (Chamonix 2016)**

**Monday 25 January 2016 - Thursday 28 January 2016**

**Chamonix - Les Aiglons  
Programme**

# Table of contents

Monday 25 January 2016 .....	1
Introduction .....	1
Session 1: Lessons from 2015 .....	1
Session 2: Key Challenges for Operation .....	1
Tuesday 26 January 2016 .....	2
Sessions 3 & 4: LHC Hardware Performance .....	2
Sessions 3 & 4: LHC Hardware Performance .....	2
Wednesday 27 January 2016 .....	3
Session 5: 2016 and Run 2 .....	3
Session 6: LIU .....	3
Thursday 28 January 2016 .....	4
Session 7: HL-LHC .....	4
Session 8: (E)YETS and Long Shutdown 2 Strategy and Preparation .....	4

# Monday 25 January 2016

## Introduction (08:30-08:45)

- Presenters: BORDRY, Frederick

## Session 1: Lessons from 2015 (08:45-12:30)

*Chair: J. Wenninger, Sc. secretary: K. Fuchsberger*

time	[id] title	presenter
09:00	[13] Lessons from LHC operation in 2015	PAPOTTI, Giulia
09:30	[14] LHC Operation and Efficiency in 2015	SOLFAROLI CAMILLOCCI, Matteo
10:00	[15] Machine Protection at 6.5 TeV	UYTHOVEN, Jan
10:30	Coffee break	
11:00	[16] Collimation System Performance	SALVACHUA FERRANDO, Belen Maria
11:30	[17] RF and Transverse Damper Systems	BAUDRENGHIEN, Philippe
12:00	[18] Circuit Performance at 6.5 TeV and beyond	VERWEIJ, Arjan

## Session 2: Key Challenges for Operation (16:45-20:00)

*Chairs: Mike Lamont, Chiara Bracco*

time	[id] title	presenter
16:45	[39] UFOs, ULO, BLMS	AUCHMANN, Bernhard
17:10	[40] Electron Cloud Effects	IADAROLA, Giovanni
17:35	[41] Beam Induced Heating including TDI	SALVANT, Benoit
17:55	[42] Instabilities, Impedance, LR Beam-beam	LI, Kevin Shing Bruce
18:20	Break	
18:35	[43] Challenges for the SPS and SPS-to-LHC transfer for the 2016 Run 1	KAIN, Verena
19:00	[44] Diagnostics	RONCAROLO, Federico
19:25	[46] YETS: Update from CMS and ATLAS	BALL, Austin PONTECORVO, Ludovico

## Tuesday 26 January 2016

### **Sessions 3 & 4: LHC Hardware Performance (08:30-12:00)**

**Chairs:** *Matteo Solfaroli, Markus Zerlauth*

**Scientific Secretaries:** *Mirko Pojer, David Nisbet*

time	[id] title	presenter
08:30	[19] Accelerator Fault Tracker & Availability Working Group – Where Do We Go From Here?	TODD, Benjamin
08:55	[20] LHC Availability - Status and Prospects	APOLLONIO, Andrea
09:30	[21] Cryogenics	FERLIN, Gerard
10:00	Coffee break	
10:30	[22] Quench Detection System	DENZ, Reiner
11:00	[49] Electrical Performance of Magnet Circuits	RODRIGUEZ MATEOS, Felix
11:30	[50] Power Converters	MONTABONNET, Valerie

### **Sessions 3 & 4: LHC Hardware Performance: Sessions 3 & 4: LHC Hardware Performance (16:45-20:00)**

**Chairs:** *Matteo Solfaroli, Markus Zerlauth*

**Scientific Secretaries:** *Mirko Pojer, David Nisbet*

time	[id] title	presenter
16:45	[23] LBDS and Injection Protection	BRACCO, Chiara
17:15	[51] RF/ADT	BUTTERWORTH, Andy
17:45	[52] Beam Instrumentation	VIGANÒ, William
18:15	Break	
18:30	[53] Technical Infrastructure	NIELSEN, Jesper
19:00	[24] Radiation to Electronics - R2E	DANZECA, Salvatore BRUGGER, Markus
19:25	[25] Availability in view of Increasing Beam Energy to 14 TeV	SCHMIDT, Rudiger

## Wednesday 27 January 2016

### **Session 5: 2016 and Run 2 (08:30-12:25)**

**Chair: Paul Collier, Scientific Secretary: Giulia Papotti**

**- Conveners: Collier, Paul; Papotti, Giulia**

time	[id] title	presenter
08:30	[54] LHC YETS Recovery	POJER, Mirko
08:45	[7] Experiments: Expectations and Requirements	BOYD, Jamie
09:10	[8] LHC Machine Configuration in the 2016 Proton Run	BRUCE, Roderik
09:35	[9] Beams from Injectors in 2016	STEERENBERG, Rende
10:00	Coffee break	
10:30	[10] Plans for the Ion Run in 2016	ALEMANY FERNANDEZ, Reyes
10:55	[11] Key Machine Development for 2016 and Run 2	TOMAS GARCIA, Rogelio
11:20	[12] Plans for 2016 and Run 2	LAMONT, Mike

### **Session 6: LIU (16:45-20:00)**

**- Conveners: Meddahi, Malika; Rumolo, Giovanni**

time	[id] title	presenter
16:45	[0] Introductory Remarks: LIU Baseline and Proton/Ion Beam parameters through the Chain	RUMOLO, Giovanni MEDDAHI, Malika
16:55	[1] LIU-IONS PS injectors: Baseline, Outcome from 2015 Operation and next steps	SCRIVENS, Richard
17:25	[2] LINAC4: 2015 Progress, Lessons and Implications on the Performance Reach and Options	LOMBARDI, Alessandra
17:45	[3] LIU-PSB & PS: Main 2015 Findings and Achievements and Main Objectives for 2016	HANKE, Klaus
18:15	Break	
18:30	[4] Main Outcomes from 2015 for LIU-SPS	GODDARD, Brennan
19:00	[5] LIU-RF Systems along the Injector Chain and Outlook on Post-LS2 Performance	DAMERAU, Heiko
19:30	[6] LIU: Transverse Feedback Systems along the Injectors Chain and Outlook for Post-LS2 Performance	HOFLE, Wolfgang

# Thursday 28 January 2016

## **Session 7: HL-LHC (08:30-12:00)**

**Chairs: Oliver Brüning**

**Scientific Secretary: Yannis Papaphilippou**

time	[id] title	presenter
08:30	[26] Performance Limitations in HL-LHC after LIU Upgrade	ARDUINI, Gianluigi
08:55	[27] RF Upgrade Paths	JENSEN, Erk
09:20	[28] Collimation Upgrade Path for the HL-LHC	REDAELLI, Stefano
09:45	[29] Crab Cavity Test Installation in the SPS	VANDONI, Giovanna
10:10	Coffee break	
10:30	[30] Coating Options for IR2 and IR8	COSTA PINTO, Pedro
10:55	[31] Lessons Learned from the Civil Engineering Test Drilling and Earthquakes on LHC Vibration Tolerances	WENNINGER, Jorg
11:20	[32] Heavy Ion Operation after LS2	JOWETT, John

## **Session 8: (E)YETS and Long Shutdown 2 Strategy and Preparation (14:00-17:30)**

**Chairman: José Miguel Jiménez**

**Scientific Secretary: J.Ph. Tock**

time	[id] title	presenter
14:00	[33] LIU Activities during LS2, highlight of changes with respect to last year	COUPARD, Julie
14:25	[34] HL-LHC Activities during LS2, highlight of changes with respect to last year	TAVIAN, Laurent Jean
14:50	[35] LHC Experiments Activities during LS2	LINDNER, Rolf
15:15	[36] Non-LHC Experiments Activities during LS2	BRUGGER, Markus EVRARD, Sebastien
15:40	Break	
15:55	[37] First Feedback from Plan Tool	FORAZ, Katy
16:20	[38] Preliminary Master Schedule	BERNARDINI, Marzia
16:45	[47] General Safety	OTTO, Thomas