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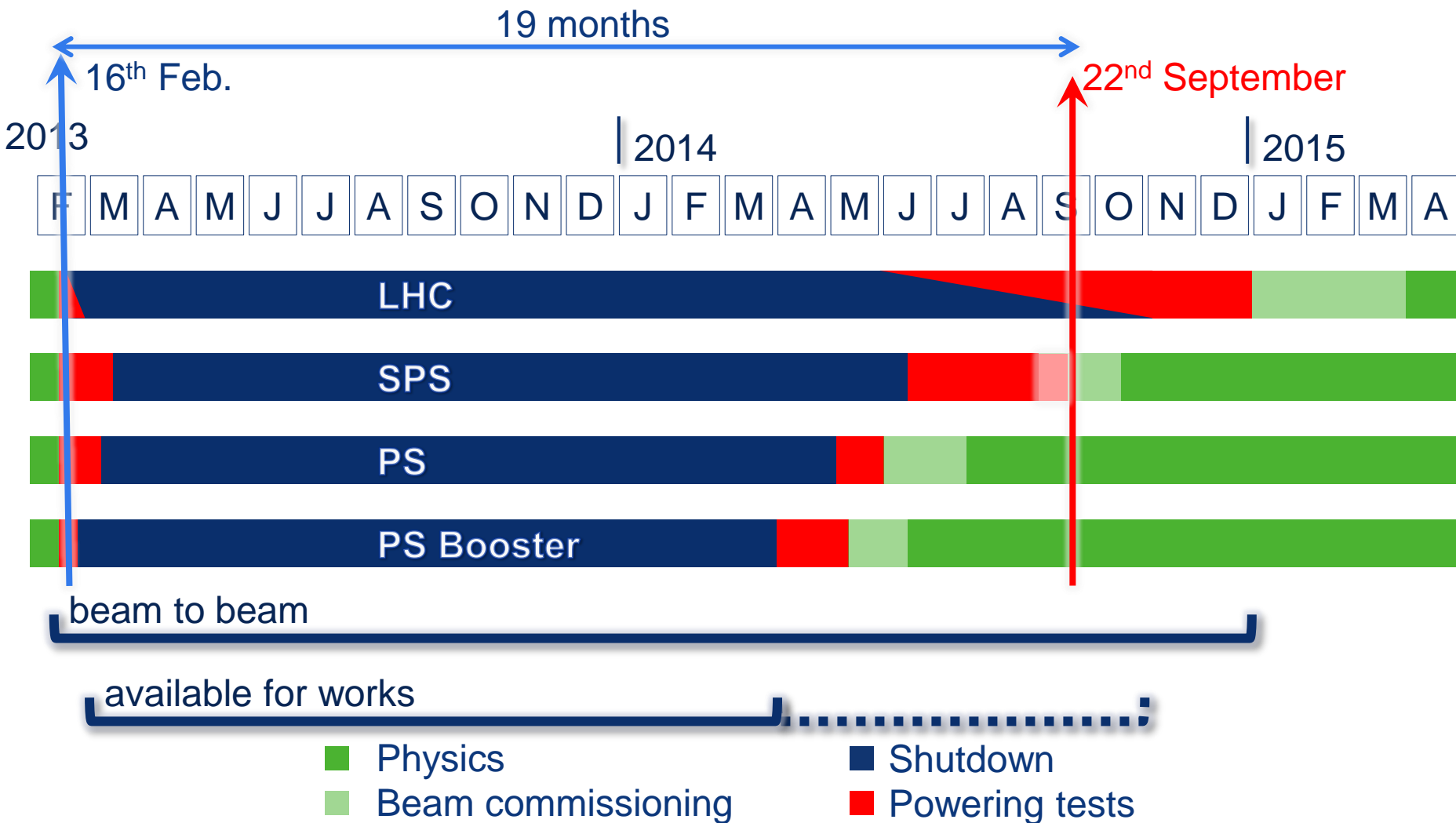
LHC Performance Workshop

Introduction

Frédéric Bordry

22nd September 2014

LS 1 from 16th Feb. 2013 to Dec. 2014

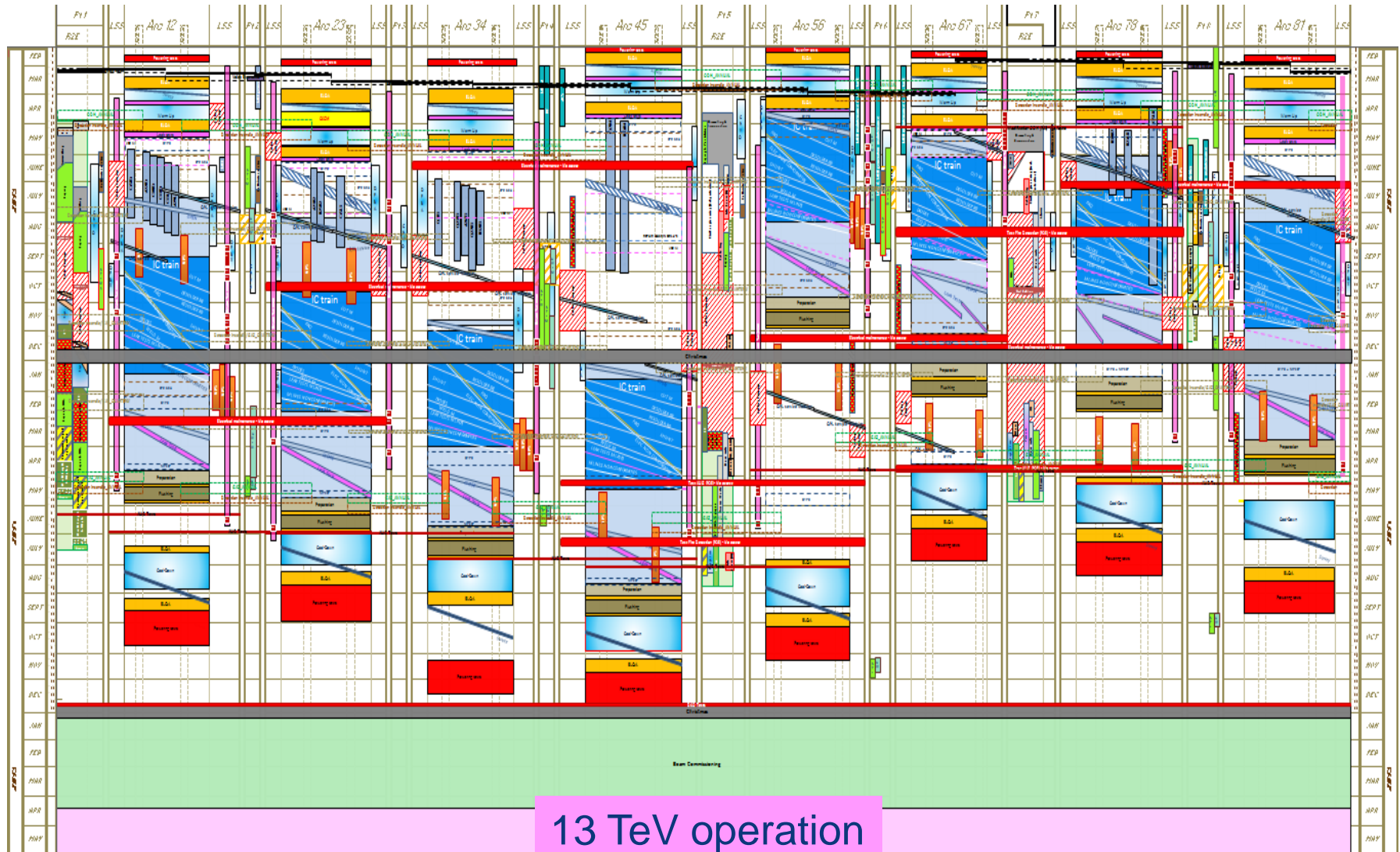


LHC status Overview

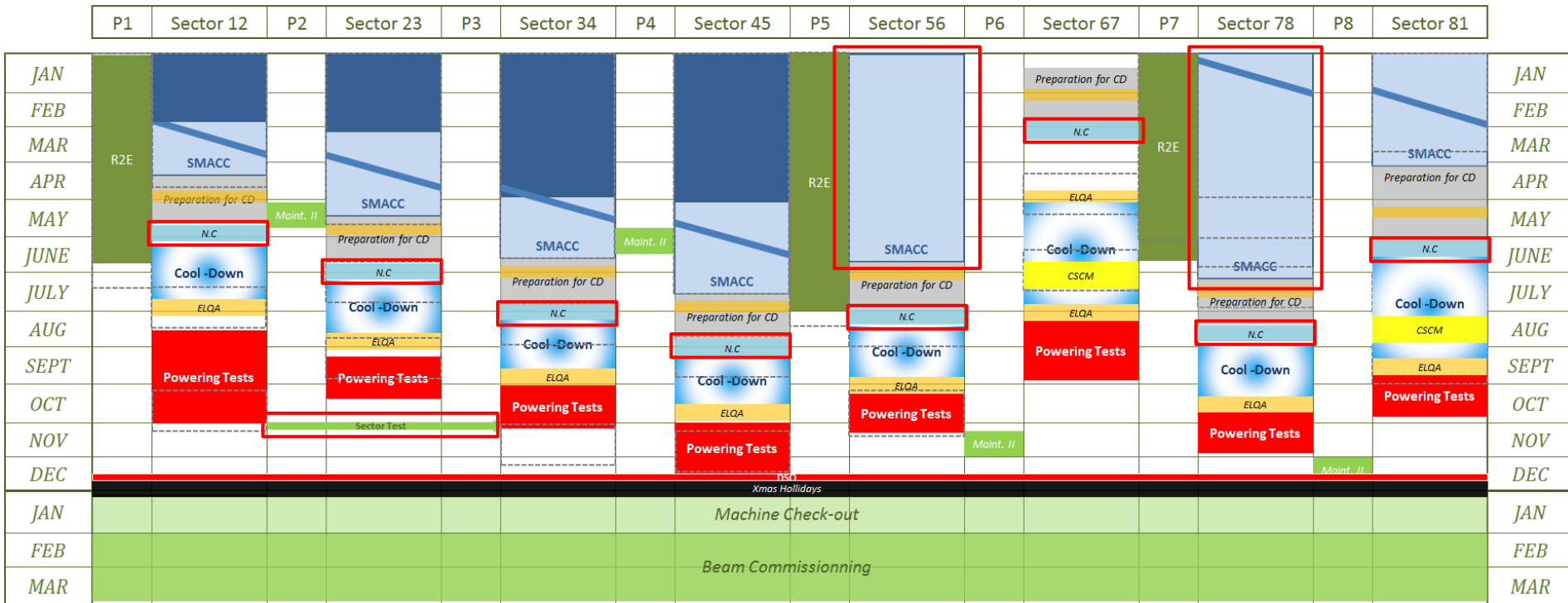
**Powering tests
Start: 15-Sep-14**

#	Sector	IC Closed	Final LT	Pressure Test	Flushing (end)	NC after P Test (end)	Cool-down	CSCM (end)	ElQA 1.9 K (start)	ElQA 1.9 K (end)	Powering Tests (start)
1	67	18-Nov-13	03-Dec-13	15-Jan-14	20-Feb-14	24-Mar-14	1.9 K	24-Jul-14	Done	10-Sep-14	On-going
2	81	27-Feb-14	02-Apr-14	08-Apr-14	20-May-14	10-Jun-14	55 K	22-Aug-14	30-Sep-14	17-Oct-14	17-Oct-14
3	12	02-Apr-14	05-May-14	16-May-14	27-Jun-14	16-Jul-14	20 K	26-Sep-14	13-Oct-14	31-Oct-14	03-Nov-14
5	56	07-May-14	11-Jun-14	18-Jun-14	20-Jul-14	19-Aug-14	75 K	17-Oct-14	28-Oct-14	10-Nov-14	11-Nov-14
6	78	22-Apr-14	03-Jul-14	02-Jul-14	04-Aug-14	20-Aug-14	140 K	23-Oct-14	05-Nov-14	25-Nov-14	12-Jan-15
4	23	30-Apr-14	28-May-14	05-Jun-14	11-Jul-14	26-Aug-14	190 K	30-Oct-14	17-Nov-14	02-Dec-14	03-Dec-14
7	34	20-May-14	24-Jun-14	16-Jul-14	25-Aug-14	On-going	01-Oct	14-Nov-14	26-Nov-14	09-Dec-14	10-Dec-14
8	45	18-Jun-14	04-Jul-14	31-Jul-14	03-Sep-14	On-going	30-Sep	24-Nov-14	08-Dec-14	16-Jan-14	19-Jan-15

LS1: LHC schedule

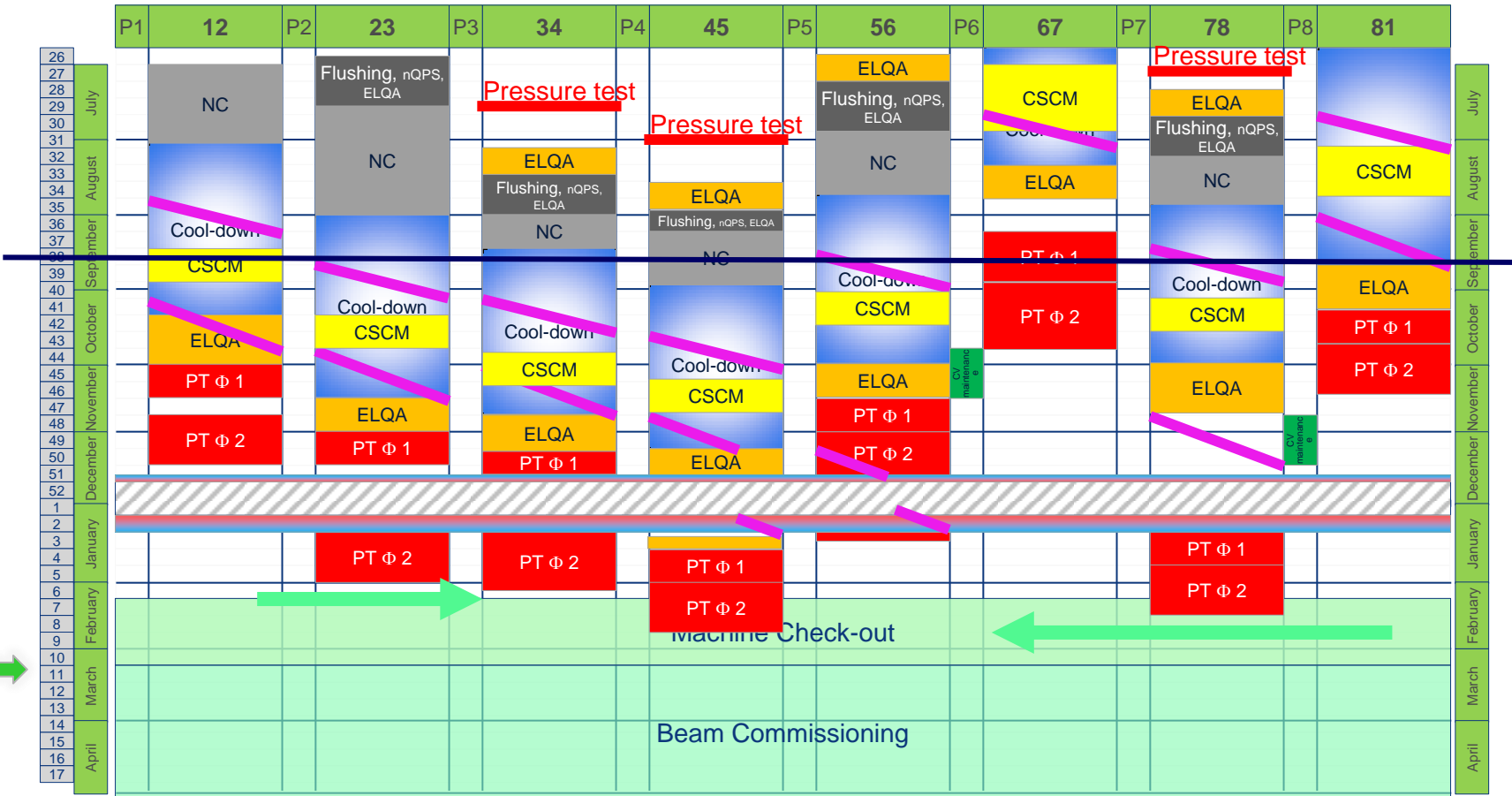


- Schematic view of version 3.1, now includes
 - DFBA repairs at P6 and P8
 - a margin of 2 weeks after flushing for N.C. solving
 - The sector test from P2 to P3



LHC schedule V4.1

**Safety First,
Quality Second,
Schedule Third**



1st beam on week 11 (starting 9th March 2015)



LHC Performance Workshop (Chamonix 2014)

1st preparation meeting: 21st March 2014

- How to restart the machine?
- Strategy for first year and for all of run 2
- Consolidation strategy
- LS2 preparation
- HL-LHC & LIU

6 general preparation meetings

Spirit: no status but open questions and options

**Difficult selection through DHs and Session Chairs
(130-140 participants per session)**

Session 1: LS1, HW Commissioning, Powering Tests and Cold Check-out - Coming out of LS1

Chair: Mirko Pojer

Scientific secretary: Laurette Ponce

Session 2: Injector Status and Beams for LHC, Dry Runs, Sector Tests with Beam

Chair: Rende Steerenberg;

Scientific Secretary: Reyes Alemany Fernandez

Session 3: 2015 Commissioning with Beam

Chair: Mike Lamont

Scientific secretary: Giulia Papotti

Session 4: LHC: Challenges and Strategy for Run2

Chair: Markus Zerlauth

Scientific secretary: Belen Maria Salvachua Ferrando

Session 5: LIU (LHC Injector Upgrade)

Chair: Malika Meddahi, Giovanni Rumolo

Session 6: HL-LHC (High-Luminosity LHC)

Chair: Oliver Bruning; Scientific secretary: Paolo Ferracin

Session 7: Accelerators and non LHC Experiment Areas Consolidation up to LS3

Chairs: Michael Benedikt, Florian Sonnemann

Session 8: Long Shutdown 2 Strategy and Preparation

Chair: José Miguel Jiménez; Scientific secretary: Jean-Philippe Tock

CERN Machine Advisory Committee

Brinkmann Reinhard	DESY
Fischer Wolfram	BNL
Gourlay Stephen	LBNL
Holtkamp Norbert	SLAC
Oide Katsunobu	KEK
Roser Thomas (chair)	BNL
Seeman John	SLAC
Shiltsev Vladimir	FNAL (from 24 th Sept.)

Closed session on Friday 26th September at CERN

CMAC Close out : Friday 26th September at 15h30

(CERN - Room Georges Charpak)

Summary session LHC Performance Workshop (Chamonix 2014)

**Wednesday, 8th October 2014
14:15, CERN Globe**

<http://indico.cern.ch/e/chamonix2014-summary>

LHC PERFORMANCE WORKSHOP (Chamonix 2014) – 22nd to 25th September 2014

	a.m. session	Coffee break	a.m. session (Cont'd)	Coffee break	p.m. session	Coffee break	p.m. session (Cont'd)	Dinner
Monday 22 September Sessions 1 & 2	09:00-10:30	10:30-11:00	11:00-12:30	15:30-16:00	16:00-19:00			19:45
Tuesday 23 September Sessions 3 & 4	09:00-10:10	10:10-10:40	10:40-12:15	15:30-16:00	16:00-19:00			19:45
Wednesday 24 September Sessions 5 & 6	09:00-10:20	10:20-10:50	10:50-12:30	15:30-16:00	16:00-19:00			From 19:00 Aperitif, 20:30 Dinner
Thursday 25 September Sessions 7 & 8	09:00-10:40	10:40-11:10	11:10-12:40		14:00-15:30	15:30-16:00	16:00-17:30	

Shuttles

Buses leave CERN from bldg. 33 and Chamonix from Hotel Les Aiglons

Draft Timetable*

Monday 22nd September

Tuesday 23rd September

19:15 Wednesday 24th September

Thursday 25th September

Bldg 33->Les Aiglons

07:00 & 14:00

07:00 & 14:00

07:00 & 14:00

07:00 & 11:00

Les Aiglons ->Bldg 33

13:00 & 19:15

(No transport at 13:00) -

13:00 & 19:15

13:00 & 18:00



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