

# Joint HiLumi LHC / LARP Collaboration Meeting



## Report of Contributions

Contribution ID : **0**

Type : **not specified**

## Welcome and scope

*Wednesday, 16 November 2011 09:15 (15)*

### Summary

**Session Classification :** Joint HiLumi LHC - LARP session - 16 Nov (AM)

Contribution ID : 1

Type : **not specified**

## Status of HiLumi

*Wednesday, 16 November 2011 09:30 (40)*

### Summary

**Presenter(s)** : Prof. ROSSI, Lucio (CERN)

**Session Classification** : Joint HiLumi LHC - LARP session - 16 Nov (AM)

Contribution ID : 2

Type : **not specified**

## **The US point of view for HiLumi**

*Wednesday, 16 November 2011 10:10 (10)*

### **Summary**

**Presenter(s)** : Dr STRAUSS, Bruce (U.S. Department of Energy)

**Session Classification** : Joint HiLumi LHC - LARP session - 16 Nov (AM)

Contribution ID : 3

Type : **not specified**

## **LARP general**

*Wednesday, 16 November 2011 10:40 (20)*

### **Summary**

**Presenter(s)** : Dr PREBYS, Eric (Fermilab)

**Session Classification** : Joint HiLumi LHC - LARP session - 16 Nov (AM)

Contribution ID : 4

Type : **not specified**

## **LARP Accelerator Systems**

*Wednesday, 16 November 2011 11:00 (30)*

### **Summary**

**Presenter(s)** : MARKIEWICZ, Thomas (SLAC)

**Session Classification** : Joint HiLumi LHC - LARP session - 16 Nov (AM)

Contribution ID : 5

Type : **not specified**

## **LARP Magnet Systems**

*Wednesday, 16 November 2011 11:30 (30)*

### **Summary**

**Presenter(s)** : SABBI, GianLuca (LBNL)

**Session Classification** : Joint HiLumi LHC - LARP session - 16 Nov (AM)

Contribution ID : 6

Type : **not specified**

## **Conductor for R&D and production**

*Wednesday, 16 November 2011 13:50 (20)*

### **Summary**

**Presenter(s) :** GHOSH, Arup (Brookhaven National Laboratory (BNL)); Dr WANDERER, Peter (BNL)

**Session Classification :** Magnet R&D session - 16 Nov (PM)



Contribution ID : 7

Type : **not specified**

## **HQ cable development**

*Wednesday, 16 November 2011 14:10 (20)*

### **Summary**

**Presenter(s)** : DIETDERICH, Daniel (LBNL)

**Session Classification** : Magnet R&D session - 16 Nov (PM)

Contribution ID : 8

Type : **not specified**

## **LQ results and next steps**

*Wednesday, 16 November 2011 13:30 (20)*

### **Summary**

**Presenter(s)** : CHLACHIDZE, Guram (FNAL)

**Session Classification** : Magnet R&D session - 16 Nov (PM)

Contribution ID : 9

Type : **not specified**

## **HQ coil design and fabrication**

*Wednesday, 16 November 2011 14:30 (20)*

### **Summary**

**Presenter(s)** : FELICE, Helen (LBNL)

**Session Classification** : Magnet R&D session - 16 Nov (PM)

Contribution ID : **10**

Type : **not specified**

## **HQ mirror assembly**

*Wednesday, 16 November 2011 14:50 (20)*

### **Summary**

**Presenter(s)** : BOSSERT, Roger (FNAL)

**Session Classification** : Magnet R&D session - 16 Nov (PM)

Contribution ID : **11**

Type : **not specified**

# Welcome

*Friday, 18 November 2011 09:00 (10)*

## Summary

**Presenter(s)** : MYERS, Steve (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : 12

Type : **not specified**

## **EU R&D for Accelerators**

*Friday, 18 November 2011 10:00 (25)*

### **Summary**

**Presenter(s)** : Dr ALEKSAN, Roy (CPPM/IN2P3-CNRS and DAPNIA-CEA)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : 13

Type : **not specified**

## **LHC physics results and long term perspectives**

*Friday, 18 November 2011 09:10 (25)*

### **Summary**

**Presenter(s)** : MANGANO, Michelangelo (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : 14

Type : **not specified**

## **The CERN long term plan**

*Friday, 18 November 2011 09:35 (25)*

### **Summary**

**Presenter(s)** : HEUER, Rolf (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov



Contribution ID : 15

Type : **not specified**

## **The FP7-HiLumi Design Study and HL-LHC project**

*Friday, 18 November 2011 10:45 (25)*

### **Summary**

**Presenter(s)** : Prof. ROSSI, Lucio (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : 16

Type : **not specified**

## **Baseline scenario and options for 3000 fb-1**

*Friday, 18 November 2011 14:00 (20)*

### **Summary**

**Presenter(s)** : BRUNING, Oliver (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : 17

Type : **not specified**

## **The USA contribution to HL-LHC**

*Friday, 18 November 2011 11:35 (25)*

### **Summary**

**Presenter(s)** : Dr STRAUSS, Bruce (U.S. Department of Energy)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : **18**

Type : **not specified**

## **The JP contribution to HL-LHC**

*Friday, 18 November 2011 12:00 (25)*

### **Summary**

**Presenter(s) :** Prof. YAMAMOTO, Akira (High Energy Accelerator Research Organization (JP))

**Session Classification :** HiLumi LHC Public Session - 18 Nov

Contribution ID : **19**

Type : **not specified**

## **IR Magnets**

*Friday, 18 November 2011 14:20 (20)*

### **Summary**

**Presenter(s)** : Dr TODESCO, Ezio (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : **20**

Type : **not specified**

## **Crab Cavity**

*Friday, 18 November 2011 14:40 (20)*

### **Summary**

**Presenter(s)** : Dr JENSEN, Erk (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : 21

Type : **not specified**

## Collimation

*Friday, 18 November 2011 15:00 (20)*

### Summary

**Presenter(s)** : Dr ASSMANN, Ralph Wolfgang (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : **22**

Type : **not specified**

## **Cold Powering and SC links**

*Friday, 18 November 2011 15:20 (20)*

### **Summary**

**Presenter(s)** : BALLARINO, Amalia (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov



Contribution ID : 23

Type : **not specified**

## High Field Magnet program and HE-LHC

*Friday, 18 November 2011 15:40 (20)*

### Summary

**Presenter(s)** : DE RIJK, Gijs (CERN); Mr BOTTURA, Luca (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : 24

Type : **not specified**

## **Cryogenics for HiLumi**

### **Summary**

**Presenter(s)** : Mr TAVIAN, Laurent (CERN)

Contribution ID : 25

Type : **not specified**

## **Energy deposition and LHC modeling**

### **Summary**

**Presenter(s)** : CERUTTI, Francesco (CERN)

Contribution ID : 26

Type : **not specified**

## **11 T LHC dipole progress**

### **Summary**

**Presenter(s)** : Dr ZLOBIN, Alexander (Fermilab); KARPPINEN, Mikko (CERN)

Contribution ID : 27

Type : **not specified**

## **Progress of other WPs and Conclusions**

*Friday, 18 November 2011 16:00 (10)*

### **Summary**

**Presenter(s)** : Prof. ROSSI, Lucio (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : **28**

Type : **not specified**

## **Hollow Elens**

*Wednesday, 16 November 2011 13:30 (20)*

### **Summary**

**Presenter(s)** : STANCARI, Giulio (FNAL)

**Session Classification** : Accelerator Systems session - 16 Nov (PM)

Contribution ID : **29**

Type : **not specified**

## **LPA scheme**

*Wednesday, 16 November 2011 13:50 (20)*

### **Summary**

**Presenter(s)** : BHAT, Chandrashekhara (Fermi National Accelerator Lab. (US))

**Session Classification** : Accelerator Systems session - 16 Nov (PM)

Contribution ID : **30**

Type : **not specified**

## **Instrumentation**

*Wednesday, 16 November 2011 14:10 (20)*

### **Summary**

**Presenter(s)** : RATTI, Alessandro (LBNL)

**Session Classification** : Accelerator Systems session - 16 Nov (PM)



Contribution ID : 31

Type : **not specified**

## **Beam-Beam Studies**

*Wednesday, 16 November 2011 14:30 (20)*

### **Summary**

**Presenter(s)** : WHITE, Simon (BNL)

**Session Classification** : Accelerator Systems session - 16 Nov (PM)

Contribution ID : **32**

Type : **not specified**

## **T980**

*Wednesday, 16 November 2011 14:50 (20)*

### **Summary**

**Presenter(s)** : MOKHOV, Nikolai (FNAL)

**Session Classification** : Accelerator Systems session - 16 Nov (PM)

Contribution ID : **33**

Type : **not specified**

## **UA9**

*Wednesday, 16 November 2011 15:40 (20)*

### **Summary**

**Presenter(s)** : Dr MONTESANO, Simone (CERN)

**Session Classification** : Accelerator Systems session - 16 Nov (PM)

Contribution ID : 34

Type : **not specified**

## **SPS FB & LLRF Status**

*Wednesday, 16 November 2011 16:00 (30)*

### **Summary**

**Presenter(s)** : FOX, John D. (SLAC)

**Session Classification** : Accelerator Systems session - 16 Nov (PM)

Contribution ID : 35

Type : **not specified**

## **Instability Calculations**

*Wednesday, 16 November 2011 16:30 (20)*

### **Summary**

**Presenter(s)** : BUROV, Alexei (FNAL)

**Session Classification** : Accelerator Systems session - 16 Nov (PM)

Contribution ID : 36

Type : **not specified**

## PS2 Closeout

### Summary

**Presenter(s)** : QIANG, Ji (LBNL)

Contribution ID : 37

Type : **not specified**

## RC Status

*Wednesday, 16 November 2011 16:50 (20)*

### Summary

**Presenter(s)** : MARKIEWICZ, Tom (SLAC)

**Session Classification** : Accelerator Systems session - 16 Nov (PM)

Contribution ID : **38**

Type : **not specified**

## **Management and Technical Coordination**

*Thursday, 17 November 2011 14:00 (20)*

### **Summary**

**Presenter(s)** : Prof. ROSSI, Lucio (CERN)

**Session Classification** : HiLumi LHC Plenary Session - 17 Nov (PM)



Contribution ID : **39**

Type : **not specified**

## **Administration of HiLumi FP7**

*Thursday, 17 November 2011 14:35 (20)*

### **Summary**

**Presenter(s)** : Dr STAVREV, Svetlomisir (CERN)

**Session Classification** : HiLumi LHC Plenary Session - 17 Nov (PM)

Contribution ID : **40**

Type : **not specified**

## **Communication and tools**

*Thursday, 17 November 2011 14:55 (15)*

### **Summary**

**Presenter(s)** : KAHLE, Kate (CERN)

**Session Classification** : HiLumi LHC Plenary Session - 17 Nov (PM)

Contribution ID : 41

Type : **not specified**

## **Interface between WPs inside and outside FP7**

*Thursday, 17 November 2011 15:10 (20)*

### **Summary**

**Presenter(s)** : Prof. ROSSI, Lucio (CERN)

**Session Classification** : HiLumi LHC Plenary Session - 17 Nov (PM)

Contribution ID : 42

Type : **not specified**

## **Plan for HQ test at CERN**

*Wednesday, 16 November 2011 16:30 (20)*

### **Summary**

**Presenter(s)** : BAJKO, Marta (CERN)

**Session Classification** : Magnet R&D session - 16 Nov (PM)

Contribution ID : 43

Type : **not specified**

## **Discussion: HQ performance and plans**

*Wednesday, 16 November 2011 17:10 (20)*

### **Summary**

**Presenter(s)** : SABBI, Gianluca (Universita e INFN (IT))

**Session Classification** : Magnet R&D session - 16 Nov (PM)

Contribution ID : 44

Type : **not specified**

## **HQ field quality**

*Wednesday, 16 November 2011 16:00 (30)*

### **Summary**

**Presenter(s)** : WANG, Xiaorong (LBL)

**Session Classification** : Magnet R&D session - 16 Nov (PM)

Contribution ID : 45

Type : **not specified**

## **LHQ status and plans**

*Wednesday, 16 November 2011 17:30 (30)*

### **Summary**

**Presenter(s)** : AMBROSIO, Giorgio (Fermilab)

**Session Classification** : Magnet R&D session - 16 Nov (PM)

Contribution ID : 46

Type : **not specified**

## **Acceleration integration R&D**

*Wednesday, 16 November 2011 16:50 (20)*

### **Summary**

**Presenter(s)** : Dr WANDERER, Peter (BNL)

**Session Classification** : Magnet R&D session - 16 Nov (PM)



Contribution ID : 47

Type : **not specified**

## **General topic - Workflow between beam dynamics, magnet design and energy deposition - 17 Nov (AM)**

The workflow between the different working packages will be discussed, giving tentative deadlines, validated by all the actors to be sure that each part has the proper information at the right time, and to identify bottlenecks.

### **Summary**

**Presenter(s) :** Dr TODESCO, Ezio (CERN)

Contribution ID : 50

Type : **not specified**

## **Synergies and common issues with 11 T**

*Thursday, 17 November 2011 11:00 (30)*

What are the common choices and what is being made different in TQ/HQ and in the 11 T in terms of design - insulation - winding - stress management - radiation resistance materials.

### **Summary**

**Presenter(s)** : AUCHMANN, Bernhard (CERN)

**Session Classification** : IR Magnet Topics - 17 Nov (AM)

Contribution ID : 51

Type : **not specified**

## **Design of large aperture separation dipoles D1**

*Thursday, 17 November 2011 11:30 (30)*

Present status of design. Discussion of the main choices: margin and coil width. Analysis of the Nb<sub>3</sub>Sn conceptual design - is it viable or should we go to Nb-Ti? Fringe fields and anticorrection coils for the 180 mm case.

### **Summary**

**Presenter(s)** : XU, Qingjin (High Energy Accelerator Research Organization (JP)); NAKAMOTO, Tatsushi

**Session Classification** : IR Magnet Topics - 17 Nov (AM)

Contribution ID : 52

Type : **not specified**

## **Design of large aperture separation dipoles D2**

*Thursday, 17 November 2011 17:30 (30)*

### **Summary**

**Presenter(s)** : Dr WANDERER, Peter (BNL)

**Session Classification** : IR Magnet topics - 17 Nov (PM)

Contribution ID : 53

Type : **not specified**

## **The detector High Luminosity upgrade programme**

*Friday, 18 November 2011 11:10 (25)*

### **Summary**

**Presenter(s)** : BALL, Austin (CERN); NESSI, Marzio (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : 54

Type : **not specified**

## **Design of Nb<sub>3</sub>Sn IR quadrupoles with apertures larger than 120 mm**

*Thursday, 17 November 2011 16:30 (30)*

### **Summary**

**Presenter(s)** : FERRACIN, Paolo (CERN)

**Session Classification** : IR Magnet topics - 17 Nov (PM)

Contribution ID : 55

Type : **not specified**

## **Performance requirements for IR magnets**

*Thursday, 17 November 2011 10:30 (15)*

### **Summary**

**Presenter(s)** : DE RIJK, Gijs (CERN)

**Session Classification** : IR Magnet Topics - 17 Nov (AM)

Contribution ID : 56

Type : **not specified**

## Issues in field quality

*Thursday, 17 November 2011 10:45 (15)*

### Summary

**Presenter(s)** : SABBI, Gianluca (Universita e INFN (IT))

**Session Classification** : IR Magnet Topics - 17 Nov (AM)



Contribution ID : 57

Type : **not specified**

## **The Nb-Ti option in the new scenario for the upgrade**

*Thursday, 17 November 2011 17:00 (30)*

### **Summary**

**Presenter(s)** : KIRBY, Glyn (CERN)

**Session Classification** : IR Magnet topics - 17 Nov (PM)

Contribution ID : 58

Type : **not specified**

## HQ mirror test results

*Wednesday, 16 November 2011 15:10 (20)*

### Summary

**Presenter(s)** : CHLACHIDZE, Guram (FNAL)

**Session Classification** : Magnet R&D session - 16 Nov (PM)

Contribution ID : 59

Type : **not specified**

## **Review of quench limits**

*Thursday, 17 November 2011 16:00 (30)*

### **Summary**

**Presenter(s)** : MOKHOV, Nikolai (Fermi National Accelerator Lab. (US))

**Session Classification** : IR Magnet topics - 17 Nov (PM)

Contribution ID : **60**

Type : **not specified**

## **Beam dynamics and optics**

*Thursday, 17 November 2011 09:00 (20)*

### **Summary**

**Presenter(s)** : WOLSKI, Andrzej (University of Liverpool); BRUNING, Oliver (CERN)

**Session Classification** : General topic - Workflow between beam dynamics, magnet design and energy deposition - 17 Nov (AM)

Contribution ID : **61**

Type : **not specified**

## **Magnets**

*Thursday, 17 November 2011 09:20 (20)*

### **Summary**

**Presenter(s)** : Dr TODESCO, Ezio (CERN)

**Session Classification** : General topic - Workflow between beam dynamics, magnet design and energy deposition - 17 Nov (AM)

Contribution ID : **62**

Type : **not specified**

## Energy deposition

*Thursday, 17 November 2011 09:40 (20)*

### Summary

**Presenter(s)** : CERUTTI, Francesco (CERN)

**Session Classification** : General topic - Workflow between beam dynamics, magnet design and energy deposition - 17 Nov (AM)

Contribution ID : 63

Type : **not specified**

# **Optics and aperture lessons learned from the 2010-2011 operation of the LHC and their implications for the HL-LHC project**

*Thursday, 17 November 2011 10:55 (25)*

## **Summary**

**Presenter(s)** : Dr GIOVANNOZZI, Massimo (CERN)

**Session Classification** : Accelerator Physics - 17 Nov (AM)

Contribution ID : 64

Type : **not specified**

## **Beam-beam lessons learned form the 2010-2011 operation of the LHC and their implications for the HL-LHC project**

*Thursday, 17 November 2011 11:20 (30)*

### **Summary**

**Presenter(s)** : HERR, Werner (CERN)

**Session Classification** : Accelerator Physics - 17 Nov (AM)



Contribution ID : 65

Type : **not specified**

## **Impedance and beam stability lessons learned from the 2010-2011 operation of the LHC and their implications for the HL-LHC project**

*Thursday, 17 November 2011 11:50 (30)*

### **Summary**

**Presenter(s)** : Dr METRAL, Elias (CERN)

**Session Classification** : Accelerator Physics - 17 Nov (AM)

Contribution ID : 66

Type : **not specified**

## **The Achromatic Telescopic Squeezing (ATS) scheme: basic principles and by-products, and lessons from the 2011 machine experiments**

*Thursday, 17 November 2011 10:30 (25)*

### **Summary**

**Presenter(s)** : FARTOUKH, Stephane (CERN)

**Session Classification** : Accelerator Physics - 17 Nov (AM)

Contribution ID : 67

Type : **not specified**

## **2011 John Adams Lecture: LHC - Bold Beginning**

*Friday, 18 November 2011 16:30 (120)*

### **Summary**

**Presenter(s)** : LAMONT, Mike (CERN)

**Session Classification** : HiLumi LHC Public Session - 18 Nov

Contribution ID : 68

Type : **not specified**

## **Cold Powering system for the Hi-Luminosity upgrade: introduction and project overview**

*Thursday, 17 November 2011 10:30 (30)*

### **Summary**

**Presenter(s)** : BALLARINO, Amalia (CERN)

**Session Classification** : SC link cable - 17 Nov (AM)

Contribution ID : **69**

Type : **not specified**

## **Integration in the LHC machine: preliminary considerations**

*Thursday, 17 November 2011 11:00 (30)*

### **Summary**

**Presenter(s)** : CORSO, Jean-Pierre (CERN)

**Session Classification** : SC link cable - 17 Nov (AM)

Contribution ID : **70**

Type : **not specified**

## **Cryogenics for the Cold Powering system**

*Thursday, 17 November 2011 11:30 (30)*

### **Summary**

**Presenter(s)** : WAGNER, Udo (CERN)

**Session Classification** : SC link cable - 17 Nov (AM)

Contribution ID : 71

Type : **not specified**

## **Electrical transfer and cryostats**

*Thursday, 17 November 2011 12:00 (30)*

### **Summary**

**Presenter(s)** : YANG, Yifeng (University of Southampton)

**Session Classification** : SC link cable - 17 Nov (AM)

Contribution ID : 72

Type : **not specified**

## **Energy deposition and material studies**

*Thursday, 17 November 2011 12:30 (30)*

### **Summary**

**Presenter(s)** : Dr BROGGI, Francesco (INFN - LASA Lab.)

**Session Classification** : SC link cable - 17 Nov (AM)



Contribution ID : 73

Type : **not specified**

## HiLumi - IR Collimation

*Thursday, 17 November 2011 10:30 (15)*

### Summary

**Presenter(s)** : Dr ASSMANN, Ralph Wolfgang (CERN)

**Session Classification** : Collimation - 17 Nov (AM)

Contribution ID : 74

Type : **not specified**

## **First look at collimation in cold regions (around IR's)**

*Thursday, 17 November 2011 10:45 (20)*

### **Summary**

**Presenter(s)** : ROSSI, Adriana (CERN)

**Session Classification** : Collimation - 17 Nov (AM)

Contribution ID : 75

Type : **not specified**

## **Beta\* dependence on (IR) collimation**

*Thursday, 17 November 2011 11:05 (15)*

### **Summary**

**Presenter(s)** : Dr BRUCE, Roderik (CERN)

**Session Classification** : Collimation - 17 Nov (AM)

Contribution ID : 76

Type : **not specified**

## **Round-table discussion on work plans**

*Thursday, 17 November 2011 11:20 (60)*

### **Summary**

**Session Classification :** Collimation - 17 Nov (AM)

Contribution ID : 77

Type : **not specified**

## **Managing Resources, Cost and Risk**

*Thursday, 17 November 2011 14:20 (15)*

### **Summary**

**Presenter(s)** : BONNAL, Pierre (CERN)

**Session Classification** : HiLumi LHC Plenary Session - 17 Nov (PM)

Contribution ID : 78

Type : **not specified**

## **Crab Cavity Status**

*Thursday, 17 November 2011 10:30 (20)*

### **Summary**

**Presenter(s)** : Dr JENSEN, Erk (CERN)

**Session Classification** : Compact Crab Cavity status - 17 Nov (AM)