

# **Joint LARP CM26/Hi-Lumi Meeting at SLAC**

## **Report of Contributions**

Contribution ID: 0

Type: **not specified**

## **Status of DQW cavity and auxiliary systems production**

*Thursday, 19 May 2016 15:30 (30 minutes)*

**Presenter:** GARLASCHE, Marco (CERN)

**Session Classification:** Crab Cavity Session

Contribution ID: 1

Type: **not specified**

# Cryomodule Integration Plans

*Wednesday, 18 May 2016 17:00 (30 minutes)*

**Presenter:** TEMPLETON, Niklas (CERN)

**Session Classification:** Crab Cavity Session

Contribution ID: 2

Type: **not specified**

## DQW Frequency Analysis and Tuning Plans

*Thursday, 19 May 2016 14:00 (30 minutes)*

**Presenter:** VERDÚ-ANDRÉS, Silvia (TERA / IFIC)

**Session Classification:** Crab Cavity Session

Contribution ID: 3

Type: **not specified**

## RFD Frequency Analysis and Tuning Plans

*Thursday, 19 May 2016 14:30 (30 minutes)*

**Presenter:** Ms DE SILVA, Subashini (Old Dominion University)

**Session Classification:** Crab Cavity Session

Contribution ID: 4

Type: **not specified**

## **Plans for RFD qualification, testing and processing**

*Thursday, 19 May 2016 16:00 (30 minutes)*

**Presenter:** MCEWEN, Anne (JLAB)

**Session Classification:** Crab Cavity Session

Contribution ID: 5

Type: **not specified**

## Fluid Simulations

**Presenter:** JONES, Thomas (STFC, Daresbury)

Contribution ID: 6

Type: **not specified**

## FPC test box

*Wednesday, 18 May 2016 16:30 (30 minutes)*

**Presenter:** MITCHELL, James (Cockcroft Institute)

**Session Classification:** Crab Cavity Session



Contribution ID: 7

Type: **not specified**

## Crab Cavity Failure Modes

**Presenter:** TBD

Contribution ID: 8

Type: **not specified**

## Status of hollow electron lens desgin at CERN

*Thursday, 19 May 2016 14:00 (30 minutes)*

**Presenter:** PERINI, Diego (CERN)

**Session Classification:** Accelerator/Crab Parallel Session

Contribution ID: 9

Type: **not specified**

## **Crab cavity RF noise mitigation and transverse tail cleaning**

*Thursday, 19 May 2016 09:30 (30 minutes)*

**Presenter:** MASTORIDIS, Themis (Cal Poly)

**Session Classification:** Accelerator/Crab Parallel Session

Contribution ID: **10**

Type: **not specified**

## **Noise and emittance blow-up in the presence of beam-beam (update on simulations)**

*Thursday, 19 May 2016 10:30 (30 minutes)*

**Presenter:** QIANG, ji (LBNL)

**Session Classification:** Accelerator/Crab Parallel Session

Contribution ID: 11

Type: **not specified**

## Pros and Cons of the 200 MHz System

*Thursday, 19 May 2016 09:00 (30 minutes)*

**Presenter:** Dr LI, Kevin (CERN)

**Session Classification:** Accelerator/Crab Parallel Session

Contribution ID: **12**

Type: **not specified**

## **Impedance update (crab cavities)**

*Thursday, 19 May 2016 11:00 (30 minutes)*

**Presenter:** LI, Zenghai (SLAC)

**Session Classification:** Accelerator/Crab Parallel Session

Contribution ID: 13

Type: **not specified**

## Impedance update (other components)

*Thursday, 19 May 2016 11:30 (30 minutes)*

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

**Session Classification:** Accelerator/Crab Parallel Session

Contribution ID: 14

Type: **not specified**

## **Transverse feedback development and possible implementation to LHC/HL-LHC**

*Thursday, 19 May 2016 08:30 (30 minutes)*

**Presenter:** FOX, John (SLAC)

**Session Classification:** Accelerator/Crab Parallel Session



Contribution ID: 15

Type: **not specified**

## **Prospect for hollow e-lens contribution from the U.S.**

*Thursday, 19 May 2016 14:30 (30 minutes)*

**Presenter:** VALERIO, Linda (Fermilab)

**Session Classification:** Accelerator/Crab Parallel Session

Contribution ID: 16

Type: **not specified**

## **Beam beam long range compensation experiments at LHC**

*Thursday, 19 May 2016 16:00 (30 minutes)*

**Presenter:** VALISHEV, Alexander (Fermilab)

**Session Classification:** Accelerator/Crab Parallel Session

Contribution ID: 17

Type: **not specified**

## Interplay beam-beam and impedance

**Presenter:** ALEXAHIN, Yuri (Fermilab)

Contribution ID: **18**

Type: **not specified**

## **Update of the stability limits including the effect of electron cloud, implications for machine and HW parameters (e.g. ramp rates)**

*Thursday, 19 May 2016 16:30 (30 minutes)*

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

**Session Classification:** Accelerator/Crab Parallel Session

Contribution ID: **19**

Type: **not specified**

## Operation with high luminosity LHCb

*Thursday, 19 May 2016 12:00 (30 minutes)*

**Presenter:** PAPAPHILIPPOU, Yannis (CERN)

**Session Classification:** Accelerator/Crab Parallel Session

Contribution ID: 20

Type: **not specified**

## **Impact of low frequency noise (power converter, vibrations, etc. on emittance blow-up)**

*Thursday, 19 May 2016 17:00 (30 minutes)*

**Presenter:** FITTERER, Miriam (FNAL)

**Session Classification:** Accelerator/Crab Parallel Session

Contribution ID: 21

Type: **not specified**

## **Update of the requirements on circuits parameters from beam physics (current, acceleration and ramp rates, ripple and stability)**

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

Contribution ID: 22

Type: **not specified**

## **Beam dynamics of halo collimation with hollow electron lens**

*Thursday, 19 May 2016 15:00 (30 minutes)*

**Presenter:** FITTERER, Miriam (FNAL)

**Session Classification:** Accelerator/Crab Parallel Session



Contribution ID: 23

Type: **not specified**

## **Effect of beam screen on field quality / measurement precision**

**Presenter:** TBD

Contribution ID: 24

Type: **not specified**

## Welcome and SLAC Status

*Wednesday, 18 May 2016 08:30 (15 minutes)*

**Presenter:** Prof. RAUBENHEIMER, Tor (SLAC)

Contribution ID: 25

Type: **not specified**

## HL-LHC Status and Plans

*Wednesday, 18 May 2016 08:45 (35 minutes)*

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

Contribution ID: 26

Type: **not specified**

## Status of Crab Cavities Effort

*Wednesday, 18 May 2016 12:00 (30 minutes)*

**Presenter:** CALAGA, Rama (CERN)

Contribution ID: 27

Type: **not specified**

## **WP3 Status and Latest Achievements**

*Wednesday, 18 May 2016 10:55 (35 minutes)*

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

Contribution ID: **28**Type: **not specified**

## Beam Dynamics

*Wednesday, 18 May 2016 10:25 (30 minutes)*

Requested elements of this presentation:

- specific inputs for US deliverables: Field Quality requirements, Magnet alignment requirements, etc.
- experience from LHC operation (e.g. operation with pushed optics, observations of cold mass vibrations on the beam, instabilities, and e-cloud)
- very brief update on the status of the LHC

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

Contribution ID: **29**

Type: **not specified**

## **LARP Status and Plans**

*Wednesday, 18 May 2016 09:20 (35 minutes)*

**Presenter:** Dr APOLLINARI, Giorgio (Fermilab)

Contribution ID: **30**

Type: **not specified**

## Collimation System Status and Plans

*Wednesday, 18 May 2016 11:30 (30 minutes)*

Including the Hollow Electron Beam Collimation proposal, test results of the Rotatable Collimator in the SPS and plans for the HRMT21 test.

**Presenter:** Dr REDAELLI, Stefano Redaelli (CERN)



Contribution ID: **31**

Type: **not specified**

## **MQXFS1 strain gauge analysis**

*Thursday, 19 May 2016 08:50 (20 minutes)*

**Presenters:** VALLONE, Giorgio (CERN); PAN, Heng (LBNL)

**Session Classification:** Magnet Parallel Session

Contribution ID: **32**

Type: **not specified**

## **MQXFS1b loading**

*Thursday, 19 May 2016 09:10 (20 minutes)*

**Presenter:** PAN, Heng (LBNL)

**Session Classification:** Magnet Parallel Session

Contribution ID: 33

Type: **not specified**

## Conductor procurement and QC from LARP

*Thursday, 19 May 2016 09:30 (20 minutes)*

**Presenter:** Dr COOLEY, Lance (Fermilab)

**Session Classification:** Magnet Parallel Session

Contribution ID: 34

Type: **not specified**

## Conductor procurement and QC from CERN

*Thursday, 19 May 2016 09:50 (20 minutes)*

**Presenter:** BORDINI, Bernardo (CERN)

**Session Classification:** Magnet Parallel Session

Contribution ID: 35

Type: **not specified**

## MQXF Status and Plans

*Thursday, 19 May 2016 10:30 (30 minutes)*

**Presenters:** AMBROSIO, Giorgio (FNAL TD/MSD); FERRACIN, Paolo (CERN)

**Session Classification:** Magnet Parallel Session

Contribution ID: 36

Type: **not specified**

## MQXF quench protection update

*Thursday, 19 May 2016 11:00 (20 minutes)*

**Presenter:** Dr RAVAIOLI, Emmanuele (LBNL)

**Session Classification:** Magnet Parallel Session

Contribution ID: 37

Type: **not specified**

## Withstand voltage levels

*Thursday, 19 May 2016 11:20 (50 minutes)*

**Presenter:** RODRIGUEZ MATEOS, Felix (CERN)

**Session Classification:** Magnet Parallel Session

Contribution ID: **38**

Type: **not specified**

## Discussion

*Thursday, 19 May 2016 12:10 (20 minutes)*

**Presenter:** ALL

**Session Classification:** Magnet Parallel Session



Contribution ID: 39

Type: **not specified**

## **MQXF Structures updates and Action Items from workshop**

*Thursday, 19 May 2016 13:40 (30 minutes)*

**Presenter:** Mr PEREZ, Juan Carlos (CERN)

**Session Classification:** Magnet Parallel Session

Contribution ID: 40

Type: **not specified**

## **Upgrade of the MQXF Structures updates and Action Items from workshop**

*Thursday, 19 May 2016 14:10 (30 minutes)*

**Presenter:** CHENG, Daniel (LBNL)

**Session Classification:** Magnet Parallel Session

Contribution ID: **41**

Type: **not specified**

## **MQXFP Mirror status**

*Thursday, 19 May 2016 14:40 (30 minutes)*

**Primary author:** Mr BOSSERT, Rodger (Fermilab)

**Presenter:** Mr BOSSERT, Rodger (Fermilab)

**Session Classification:** Magnet Parallel Session

Contribution ID: 42

Type: **not specified**

## Upgrade of the Vertical Test facility at BNL

*Thursday, 19 May 2016 15:40 (30 minutes)*

**Presenter:** Mr ANERELLA, michael (BNL)

**Session Classification:** Magnet Parallel Session

Contribution ID: 43

Type: **not specified**

## Upgrade of the Vertical Test facility at CERN

*Thursday, 19 May 2016 16:10 (30 minutes)*

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

**Session Classification:** Magnet Parallel Session

Contribution ID: 44

Type: **not specified**

## MQXF and Cold-Mass Requirements

*Thursday, 19 May 2016 16:40 (30 minutes)*

**Presenter:** CARCAGNO, Ruben (FNAL)

**Session Classification:** Magnet Parallel Session

Contribution ID: 45

Type: **not specified**

## Q1/Q3 Cold-Mass design and assembly plans

*Thursday, 19 May 2016 17:10 (20 minutes)*

**Presenter:** Mr VOURIS, Antonios (FNAL)

**Session Classification:** Magnet Parallel Session

Contribution ID: 46

Type: **not specified**

## Discussion

*Thursday, 19 May 2016 17:30 (20 minutes)*

**Presenter:** ALL

**Session Classification:** Magnet Parallel Session



Contribution ID: 47

Type: **not specified**

## Toohig Candidate #1 Presentation

*Wednesday, 18 May 2016 13:35 (30 minutes)*

**Presenter:** ARSENYEV, Sergey (MIT)

Contribution ID: 48

Type: **not specified**

## Toohig Candidate #2 Presentation

*Wednesday, 18 May 2016 14:05 (30 minutes)*

**Presenter:** CABANES, Jaime (CERN)

Contribution ID: 49

Type: **not specified**

## Toohig Candidate #3 Presentation

*Wednesday, 18 May 2016 14:35 (30 minutes)*

**Presenter:** ZHA, Hao (CERN)

Contribution ID: **50**

Type: **not specified**

## **MQXFS1 test results**

**Presenter:** CHLACHIDZE, Guram (FNAL/TD/MSD)

Contribution ID: 51

Type: **not specified**

## MQXFS1 Magnetic Measurements

*Wednesday, 18 May 2016 15:30 (30 minutes)*

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

**Session Classification:** WP2-WP3 Joint Session

Contribution ID: 52

Type: **not specified**

## MQXF field quality analysis

**Presenter:** IZQUIERDO BERMUDEZ, Susana (CERN)

Contribution ID: 53

Type: **not specified**

## **MQXF Field quality expectaions based on coil cross section and effect of beam screen**

*Wednesday, 18 May 2016 16:00 (30 minutes)*

**Presenters:** HOLIK, Eddie (FNAL); IZQUIERDO BERMUDEZ, Susana (CERN)

**Session Classification:** WP2-WP3 Joint Session

Contribution ID: 54

Type: **not specified**

## Alignment tolerances

*Wednesday, 18 May 2016 17:30 (30 minutes)*

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

**Session Classification:** WP2-WP3 Joint Session



Contribution ID: 55

Type: **not specified**

## **Update of the requirements on circuits parameters from beam physics (current, acceleration and ramp rates, ripple and stability)**

*Wednesday, 18 May 2016 17:00 (30 minutes)*

**Presenter:** DE MARIA, Riccardo (CERN)

**Session Classification:** WP2-WP3 Joint Session

Contribution ID: 56

Type: **not specified**

## Preparation of US Project and Schedule

*Friday, 20 May 2016 09:00 (30 minutes)*

**Presenter:** CARCAGNO, Ruben (FNAL)

Contribution ID: 57

Type: **not specified**

## **Status of Civil engineering and plans for HL-LHC Production**

**Presenter:** CERN PROJECT OFFICE REPRESENTATIVE, TBD

Contribution ID: 58

Type: **not specified**

## QA/QC Plans and Technical Documentation

*Friday, 20 May 2016 10:00 (30 minutes)*

**Presenter:** BEJAR ALONSO, Isabel (CERN)

Contribution ID: 59

Type: **not specified**

## WP2 Parallel Session Report

*Friday, 20 May 2016 11:00 (20 minutes)*

**Presenter:** ARDUINI, Gianluigi (CERN)

Contribution ID: **60**

Type: **not specified**

## WP3 Parallel Session Report

*Friday, 20 May 2016 11:20 (20 minutes)*

**Primary author:** FERRACIN, Paolo (CERN)

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

Contribution ID: **61**

Type: **not specified**

## **WP4 Parallel Session Report**

*Friday, 20 May 2016 11:40 (20 minutes)*

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

Contribution ID: **62**

Type: **not specified**

## **Final Remarks and A.O.B.**

*Friday, 20 May 2016 12:00 (15 minutes)*

**Presenter:** Dr APOLLINARI, Giorgio (Fermilab)



Contribution ID: 63

Type: **not specified**

## **A Proposed Continuation of the LARP Research Mission**

*Friday, 20 May 2016 13:30 (15 minutes)*

**Presenter:** Dr APOLLINARI, Giorgio (Fermilab)

**Session Classification:** LARP' Discussion

Contribution ID: 64

Type: **not specified**

## WBFS Technology in HL-LHC

*Friday, 20 May 2016 13:45 (25 minutes)*

**Presenter:** FOX, John (SLAC)

**Session Classification:** LARP' Discussion

Contribution ID: 65

Type: **not specified**

## **E-beams for LRBB Compensation and Advanced Halo Control in LHC upgrades**

*Friday, 20 May 2016 14:10 (40 minutes)*

**Presenter:** FITTERER, Miriam (FNAL)

**Session Classification:** LARP' Discussion

Contribution ID: **66**

Type: **not specified**

## **An Electron Beam LRBB Compensation in HL-LHC**

**Presenter:** Ms FITTERER, Miriam (CERN)

Contribution ID: 67

Type: **not specified**

## **Irradiation Studies in support of HL-LHC Operations**

*Friday, 20 May 2016 15:40 (20 minutes)*

**Presenter:** Dr REDAELLI, Stefano Redaelli (CERN)

**Session Classification:** LARP' Discussion

Contribution ID: **68**

Type: **not specified**

# Synchrotron Light Based Halo Monitor

*Friday, 20 May 2016 16:00 (20 minutes)*

**Presenter:** Dr FISHER, Alan (SLAC)

**Session Classification:** LARP' Discussion

Contribution ID: **69**

Type: **not specified**

## **Ideas for Acc. Technology studies in HL-LHC**

*Friday, 20 May 2016 17:20 (20 minutes)*

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

**Session Classification:** LARP' Discussion

Contribution ID: 70

Type: **not specified**

# Lattice development for an energy doubled LHC

*Friday, 20 May 2016 14:50 (20 minutes)*

**Presenters:** Dr CAI, Yunhai (SLAC); NOSOCHKOV, Yuri (SLAC)

**Session Classification:** LARP' Discussion



Contribution ID: 71

Type: **not specified**

## **Timescale of LARP contributions to Energy Doubler**

*Friday, 20 May 2016 17:40 (20 minutes)*

**Presenter:** AMBROSIO, Giorgio (FNAL TD/MSD)

**Session Classification:** LARP' Discussion

Contribution ID: 72

Type: **not specified**

## **HL-LHC Collaboration Board and Functions in Project Execution**

*Friday, 20 May 2016 09:30 (30 minutes)*

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

Contribution ID: 73

Type: **not specified**

## LLRF for HL-LHC

*Friday, 20 May 2016 17:00 (20 minutes)*

**Presenters:** RIVETTA, Claudio (SLAC); Dr MASTORIDES, Themistoklis (SLAC)

**Session Classification:** LARP' Discussion

Contribution ID: 74

Type: **not specified**

## Teleconference Connection Info

Contribution ID: 75

Type: **not specified**

## **Field quality and dynamic aperture optimization**

*Wednesday, 18 May 2016 16:30 (30 minutes)*

**Presenter:** NOSOCHKOV, Yuri (SLAC)

**Session Classification:** WP2-WP3 Joint Session

Contribution ID: 76

Type: **not specified**

## MQXFS1 test results

*Thursday, 19 May 2016 08:30 (20 minutes)*

**Presenter:** CHLACHIDZE, Guram (FNAL/TD/MSD)

**Session Classification:** Magnet Parallel Session

Contribution ID: 77

Type: **not specified**

## High performance simulation of beam-beam and electron cloud effects for LHC upgrades

*Friday, 20 May 2016 16:40 (20 minutes)*

**Presenter:** QIANG, ji (LBNL)

**Session Classification:** LARP' Discussion

Contribution ID: 78

Type: **not specified**

## DQW Tuner Mockup test

*Wednesday, 18 May 2016 16:00 (30 minutes)*

**Presenter:** CASTILLA, Alejandro (CERN)

**Session Classification:** Crab Cavity Session



Contribution ID: 79

Type: **not specified**

## **Plans for crab cavity production in the US construction project**

*Wednesday, 18 May 2016 15:30 (30 minutes)*

**Presenter:** RISTORI, Leonardo (Fermilab)

**Session Classification:** Crab Cavity Session

Contribution ID: **80**

Type: **not specified**

## Preparation for MQXF Review

*Thursday, 19 May 2016 17:50 (30 minutes)*

**Presenter:** TOCK, Jean-Philippe (CERN)

**Session Classification:** Magnet Parallel Session

Contribution ID: **81**

Type: **not specified**

## Toohig Introduction

*Wednesday, 18 May 2016 13:30 (5 minutes)*

**Presenter:** FOX, John (SLAC)

Contribution ID: **82**

Type: **not specified**

## Discussion

*Thursday, 19 May 2016 16:30 (2 hours)*

**Presenters:** RATTI, Alessandro (LBNL); CALAGA, Rama (CERN)

**Session Classification:** Crab Cavity Session

Contribution ID: 83

Type: **not specified**

## Superconducting RF Studies & E-Lens Studies at BNL

*Friday, 20 May 2016 16:20 (20 minutes)*

**Presenter:** VERDÚ-ANDRÉS, Silvia (TERA / IFIC)

**Session Classification:** LARP' Discussion

Contribution ID: **84**

Type: **not specified**

## Dusatko Talk

*Saturday, 21 May 2016 09:30 (20 minutes)*

**Presenter:** DUSATKO, John (SLAC National Accelerator Laboratory)

**Session Classification:** Feedback and Beam Instability

Contribution ID: **85**

Type: **not specified**

## Rivetta Talk

*Saturday, 21 May 2016 09:50 (20 minutes)*

**Presenter:** RIVETTA, Claudio (SLAC)

**Session Classification:** Feedback and Beam Instability

Contribution ID: **86**

Type: **not specified**

## Metral Talk

*Saturday, 21 May 2016 10:10 (20 minutes)*

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

**Session Classification:** Feedback and Beam Instability



Contribution ID: **87**

Type: **not specified**

## Hofle Talk

*Saturday, 21 May 2016 10:30 (20 minutes)*

**Presenter:** Dr HOFLE, Wolfgang (CERN)

**Session Classification:** Feedback and Beam Instability