

# **Theatre of Dreams: Beyond the LHCb Phase 1 Upgrade**

## **Report of Contributions**

Contribution ID: 0

Type: **not specified**

**Tea/Coffee**

Contribution ID: 1

Type: **not specified**

# Welcome

*Wednesday 6 April 2016 09:00 (10 minutes)*

**Presenter:** WATTS, Stephen (University of Manchester)

Contribution ID: 2

Type: **not specified**

## Searches for NP in CP violation

**Presenter:** SILVESTRINI, Luca (INFN Rome)

Contribution ID: 3

Type: **not specified**

## General Introduction

*Wednesday 6 April 2016 09:15 (25 minutes)*

**Presenter:** WILKINSON, Guy (University of Oxford (GB))

Contribution ID: 4

Type: **not specified**

## Belle-II prospects

*Thursday 7 April 2016 11:00 (25 minutes)*

**Presenter:** GOLOB, Bostjan (University of Ljubljana)

Contribution ID: 5

Type: **not specified**

## **ATLAS/CMS prospects**

*Wednesday 6 April 2016 10:45 (25 minutes)*

**Presenter:** PALLA, Fabrizio (Universita di Pisa & INFN (IT))

Contribution ID: 6

Type: **not specified**

## Searches for NP in CP violation

*Thursday 7 April 2016 09:25 (30 minutes)*

**Presenter:** SILVESTRINI, Luca (INFN Rome)



Contribution ID: 7

Type: **not specified**

## Searches for NP in rare decays

*Thursday 7 April 2016 10:00 (30 minutes)*

**Presenter:** ISIDORI, Gino (Universitaet Zuerich (CH))

Contribution ID: 8

Type: **not specified**

## Physics benchmarks beyond LS4

*Thursday 7 April 2016 09:00 (20 minutes)*

**Presenter:** VAGNONI, Vincenzo (CERN and INFN Bologna)

Contribution ID: 9

Type: **not specified**

## **LHC capabilities beyond LS4 for IP8**

*Wednesday 6 April 2016 09:45 (30 minutes)*

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

Contribution ID: **10**

Type: **not specified**

## Summary

*Thursday 7 April 2016 15:30 (20 minutes)*

**Presenter:** WILKINSON, Guy (University of Oxford (GB))

Contribution ID: **11**

Type: **not specified**

## **Readout and DAQ after LS4, possibilities and limits.**

*Thursday 7 April 2016 11:30 (20 minutes)*

**Presenter:** NEUFELD, Niko (CERN)

**Session Classification:** Readout/DAQ/Trigger

Contribution ID: 12

Type: **not specified**

# Computing technologies for software trigger after LS4

*Thursday 7 April 2016 11:55 (20 minutes)*

**Presenter:** WHITEHEAD, Mark Peter (CERN)

**Session Classification:** Readout/DAQ/Trigger

Contribution ID: 13

Type: **not specified**

## Progress with the TORCH project

*Wednesday 6 April 2016 11:15 (15 minutes)*

**Presenter:** HARNEW, Neville (University of Oxford (GB))

**Session Classification:** TORCH PID

Contribution ID: 14

Type: **not specified**

## **TORCH concept to measure photon time**

*Wednesday 6 April 2016 11:35 (15 minutes)*

**Presenter:** FORTY, Roger (CERN)

**Session Classification:** TORCH PID



Contribution ID: 15

Type: **not specified**

## First results with simulation and plans

*Wednesday 6 April 2016 11:55 (15 minutes)*

**Presenter:** VAN DIJK, Maarten (University of Bristol (GB))

**Session Classification:** TORCH PID

Contribution ID: 16

Type: **not specified**

## **Super VELO: Overview, Technologies, Radiation Environment**

*Thursday 7 April 2016 14:25 (25 minutes)*

**Presenter:** COLLINS, Paula (CERN)

**Session Classification:** VELO

Contribution ID: 17

Type: **not specified**

## **Performance studies with full and toy simulations**

*Thursday 7 April 2016 14:55 (25 minutes)*

**Presenter:** HARRISON, Jon (University of Manchester (GB))

**Session Classification:** VELO

Contribution ID: **18**

Type: **not specified**

## **The present RICH system at $10^{34}$ Hz/cm<sup>2</sup>**

*Wednesday 6 April 2016 13:15 (15 minutes)*

**Presenter:** D'AMBROSIO, Carmelo (CERN)

**Session Classification:** RICH PID

Contribution ID: **19**

Type: **not specified**

## **PID performance at $10^{34}$ Hz/cm<sup>2</sup>**

*Wednesday 6 April 2016 13:35 (20 minutes)*

**Presenter:** EASO, Sajan (STFC - Rutherford Appleton Lab. (GB))

**Session Classification:** RICH PID

Contribution ID: 20

Type: **not specified**

## Introduction: Status of the LS3 upgrade

*Thursday 7 April 2016 13:20 (15 minutes)*

**Presenter:** MACHEFERT, Frederic (Laboratoire de l'Accelérateur Lineaire (FR))

**Session Classification:** CALO PID

Contribution ID: **21**

Type: **not specified**

## The Physics Case

*Thursday 7 April 2016 13:40 (15 minutes)*

**Presenter:** DETTORI, Francesco (CERN)

**Session Classification:** CALO PID

Contribution ID: 22

Type: **not specified**

## New technologies

*Thursday 7 April 2016 14:00 (20 minutes)*

**Presenter:** VIRDEE, Jim (Imperial College Sci., Tech. & Med. (GB))

**Session Classification:** CALO PID



Contribution ID: 23

Type: **not specified**

## UPSTREAM tracking

*Wednesday 6 April 2016 17:15 (15 minutes)*

**Presenter:** MARTINELLI, Maurizio (Ecole Polytechnique Federale de Lausanne (CH))

**Session Classification:** TRACKING STATION AT MAGNET SIDES

Contribution ID: 24

Type: **not specified**

## Characterisation of the environment

*Wednesday 6 April 2016 17:00 (15 minutes)*

**Presenter:** BABUSCHKIN, Igor (University of Manchester (GB))

**Session Classification:** TRACKING STATION AT MAGNET SIDES

Contribution ID: 25

Type: **not specified**

## **General overview (physics, infrastructure)**

*Wednesday 6 April 2016 16:30 (30 minutes)*

**Presenter:** BETTLER, Marc Olivier (CERN)

**Session Classification:** TRACKING STATION AT MAGNET SIDES

Contribution ID: 26

Type: **not specified**

## (infrastructure considerations)

**Presenter:** BETTLER, Marc Olivier (CERN)

Contribution ID: 27

Type: **not specified**

## Physics simulations

**Presenter:** BETTLER, Marc Olivier (CERN)

Contribution ID: 28

Type: **not specified**

## Running the current muon system at $2 \times 10^{34}$ Hz/cm<sup>2</sup>

*Wednesday 6 April 2016 14:00 (15 minutes)*

**Presenter:** CARDINI, Alessandro (INFN Cagliari, Italy)

**Session Classification:** MUON PID

Contribution ID: 29

Type: **not specified**

## **Challenges operating the muon system at $2 \times 10^{34}$ Hz/cm<sup>2</sup> and new detector system for high irradiation levels**

*Wednesday 6 April 2016 14:20 (35 minutes)*

**Presenter:** DE SIMONE, Patrizia (Istituto Nazionale Fisica Nucleare Frascati (IT))

**Session Classification:** MUON PID

Contribution ID: **30**

Type: **not specified**

## **New detector on the most irradiated region**



Contribution ID: 31

Type: **not specified**

## Tracker Technology Options

*Wednesday 6 April 2016 15:25 (15 minutes)*

**Presenter:** TUNING, Niels (Nikhef National institute for subatomic physics (NL))

**Session Classification:** TRACKING SYSTEM

Contribution ID: 32

Type: **not specified**

## Occupancy and Ghost Rate Studies

*Wednesday 6 April 2016 15:45 (15 minutes)*

**Presenter:** CIEZAREK, Gregory Max (Nikhef National institute for subatomic physics (NL))

**Session Classification:** TRACKING SYSTEM

Contribution ID: 33

Type: **not specified**

## Fast track finders for real-time tracking

*Wednesday 6 April 2016 16:05 (15 minutes)*

**Presenter:** NERI, Nicola (Università degli Studi e INFN Milano (IT))

**Session Classification:** TRACKING SYSTEM