

# Beauty 2016, Marseille, France



## Report of Contributions

Contribution ID : 1

Type : **not specified**

## **Theory in the LHC era: overview and vision**

*Monday, 2 May 2016 09:15 (45)*

### **Summary**

**Presenter(s)** : MURAYAMA, Hitoshi

**Session Classification** : Overview

Contribution ID : 2

Type : **not specified**

## Penguins in $\phi_s$ , $\phi_d$

*Monday, 2 May 2016 10:00 (30)*

### Summary

**Presenter(s)** : DE BRUYN, Kristof (CPPM, Aix Marseille Université, CNRS/IN2P3, Marseille, France)

**Session Classification** : b hadrons lifetime, mixing and CPV

Contribution ID : 3

Type : **not specified**

## Summary on theory

*Friday, 6 May 2016 11:10 (45)*

### Summary

**Presenter(s)** : EICHTEN, Estia (Fermilab)

**Session Classification** : Summaries

Contribution ID : 4

Type : **not specified**

## Experimental summary

*Friday, 6 May 2016 11:55 (45)*

### Summary

**Presenter(s)** : SCHUNE, Marie-Helene (Laboratoire de l'Accelérateur Lineaire (FR))

**Session Classification** : Summaries

Contribution ID : 5

Type : **not specified**

## **CP violating phase $\varphi_s$ and $\Delta\Gamma$ s measurements at LHCb**

*Monday, 2 May 2016 11:00 (20)*

### **Summary**

**Presenter(s)** : VAZQUEZ SIERRA, Carlos (Universidade de Santiago de Compostela (ES))

**Session Classification** : b hadrons lifetime, mixing and CPV

Contribution ID : 6

Type : **not specified**

## **Lifetime, mixing and CPV in ATLAS**

*Monday, 2 May 2016 11:20 (20)*

### **Summary**

**Presenter(s)** : SKINNER, Malcolm Bruce (Lancaster University (GB))

**Session Classification** : b hadrons lifetime, mixing and CPV

Contribution ID : 7

Type : **not specified**

## **Measurement of CP violation in Bs- $\rightarrow$ Jpsi Phi decays with the CMS experiment**

*Monday, 2 May 2016 11:40 (20)*

### **Summary**

**Presenter(s)** : JARVINEN, Terhi Tuuli (Helsinki Institute of Physics (FI))

**Session Classification** : b hadrons lifetime, mixing and CPV



Contribution ID : 8

Type : **not specified**

## **CPV in mixing at LHCb**

*Monday, 2 May 2016 12:00 (20)*

### **Summary**

**Presenter(s) :** DE VRIES, Jacco Andreas (Nikhef National institute for subatomic physics (NL))

**Session Classification :** b hadrons lifetime, mixing and CPV

Contribution ID : **10**

Type : **not specified**

## **Theoretical review on spectroscopy including exotic states**

*Monday, 2 May 2016 14:00 (30)*

### **Summary**

**Presenter(s)** : LEBED, Richard (Arizona State University)

**Session Classification** : Spectroscopy, onia and exotics

Contribution ID : **11**

Type : **not specified**

## **Exotic quarkonium states at CMS**

*Monday, 2 May 2016 14:30 (20)*

### **Summary**

**Presenter(s)** : CRISTELLA, Leonardo (Università & INFN, Bari (IT))

**Session Classification** : Spectroscopy, onia and exotics

Contribution ID : 12

Type : **not specified**

## **Spectroscopy, onia including exotics at LHCb**

*Monday, 2 May 2016 14:50 (20)*

### **Summary**

**Presenter(s)** : CRAIK, Daniel Charles (University of Edinburgh (GB))

**Session Classification** : Spectroscopy, onia and exotics

Contribution ID : 13

Type : **not specified**

## **Spectroscopy, onia including exotics at ATLAS**

*Monday, 2 May 2016 15:10 (20)*

### **Summary**

**Presenter(s)** : LYUBUSHKIN, Vladimir (Joint Inst. for Nuclear Research (RU))

**Session Classification** : Spectroscopy, onia and exotics

Contribution ID : 14

Type : **not specified**

## **Spectroscopy including XYZ states at BESIII**

*Monday, 2 May 2016 15:30 (20)*

### **Summary**

**Presenter(s)** : WANG, LIANGLIANG

**Session Classification** : Spectroscopy, onia and exotics

Contribution ID : 15

Type : **not specified**

## **Review of Higgs results at LHC**

*Monday, 2 May 2016 16:20 (20)*

### **Summary**

**Presenter(s)** : FAVARETO, Andrea (Università degli Studi e INFN Genova)

**Session Classification** : High pT flavour physics

Contribution ID : 16

Type : **not specified**

## **Top results from the LHC (ATLAS and CMS results)**

*Monday, 2 May 2016 16:40 (20)*

### **Summary**

**Presenter(s)** : MOHANTY, Gagan (Tata Inst. of Fundamental Research (IN))

**Session Classification** : High pT flavour physics



Contribution ID : 17

Type : **not specified**

## **Theoretical review on new Higgs**

*Monday, 2 May 2016 17:00 (30)*

### **Summary**

**Presenter(s)** : BROD, Joachim (Johannes-Gutenberg-Universitaet Mainz)

**Session Classification** : High pT flavour physics

Contribution ID : **18**

Type : **not specified**

## **ATLAS performance in run 2**

*Wednesday, 4 May 2016 11:50 (20)*

### **Summary**

**Presenter(s)**: PANDURO VAZQUEZ, Jose Guillermo (Royal Holloway, University of London)

**Session Classification** : Instrumentation

Contribution ID : **19**

Type : **not specified**

## **Theoretical overview on rare decays**

*Tuesday, 3 May 2016 09:00 (30)*

### **Summary**

**Presenter(s)** : LUNGHI, Enrico (Indiana University (US))

**Session Classification** : Semileptonic and rare decays

Contribution ID : 20

Type : **not specified**

## **Semileptonic at LHCb (RD\*)**

*Tuesday, 3 May 2016 09:30 (20)*

### **Summary**

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

**Session Classification :** Semileptonic and rare decays

Contribution ID : 21

Type : **not specified**

## **Theoretical review on semileptonic decays including $|V_{xb}|$**

*Tuesday, 3 May 2016 09:50 (30)*

### **Summary**

**Presenter(s)** : GAMBINO, paolo (università di torino)

**Session Classification** : Semileptonic and rare decays

Contribution ID : 22

Type : **not specified**

## **Semileptonic at B-factories (RD, RD\*)**

*Tuesday, 3 May 2016 10:20 (20)*

### **Summary**

**Presenter(s)** : HASENBUSCH, Jan

**Session Classification** : Semileptonic and rare decays

Contribution ID : 23

Type : **not specified**

## **Rare/semi-rare decays ( $B \rightarrow K^* \mu \mu$ , $B \rightarrow \mu \mu$ , ...) at ATLAS**

*Tuesday, 3 May 2016 11:10 (20)*

### **Summary**

**Presenter(s)** : DE SANCTIS, Umberto (University of Sussex (GB))

**Session Classification** : Semileptonic and rare decays

Contribution ID : 24

Type : **not specified**

## **B to $K^*l\bar{l}$ and rare decays at CMS**

*Tuesday, 3 May 2016 11:30 (20)*

### **Summary**

**Presenter(s)** : BOLETTI, Alessio (Universita e INFN, Padova (IT))

**Session Classification** : Semileptonic and rare decays



Contribution ID : 25

Type : **not specified**

## **Form factors for $B_s \rightarrow K\ell\nu$ decays from lattice HQET**

*Tuesday, 3 May 2016 11:50 (5)*

### **Summary**

**Presenter(s)** : KOREN, Mateusz (NIC, DESY Zeuthen)

**Session Classification** : Poster session

Contribution ID : 26

Type : **not specified**

## **Precision measurement of decay-rate asymmetries in $D^0 \rightarrow hh$ modes using the full LHCb Run-I sample**

*Tuesday, 3 May 2016 11:55 (5)*

### **Summary**

**Presenter(s)** : MARINO, Pietro (SNS & INFN-Pisa (IT))

**Session Classification** : Poster session

Contribution ID : 27

Type : **not specified**

## **Measurement of the branching fraction ratio $\text{Br}(\text{Bc} \rightarrow \text{Psi}(2\text{S}) \pi) / \text{Br}(\text{Bc} \rightarrow \text{Jpsi} \pi)$ at LHCb**

*Tuesday, 3 May 2016 12:00 (5)*

### **Summary**

**Presenter(s)** : AN, Liupan (Ecole Polytechnique Federale de Lausanne (CH))

**Session Classification** : Poster session

Contribution ID : 28

Type : **not specified**

## **Measurement of correlations between heavy-favour decay electrons and unidentified charged particles in p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV and in pp collisions at 7TeV**

*Tuesday, 3 May 2016 12:10 (5)*

### **Summary**

**Presenter(s)** : MAS, Alexis (Universidade de Sao Paulo (BR))

**Session Classification** : Poster session

Contribution ID : 29

Type : **not specified**

## **b-anomalies related to leptons and LFUV**

*Tuesday, 3 May 2016 14:00 (30)*

### **Summary**

**Presenter(s)** : CRIVELLIN, Andreas (CERN)

**Session Classification** : Semileptonic and rare decays

Contribution ID : **30**

Type : **not specified**

## **Electroweak penguins with di-leptons, including $K^*$ $\mu\mu$ , $R_K$ , ...**

*Tuesday, 3 May 2016 14:30 (20)*

### **Summary**

**Presenter(s)** : PETRIDIS, Konstantinos (University of Bristol (GB))

**Session Classification** : Semileptonic and rare decays

Contribution ID : 31

Type : **not specified**

## **Semileptonic B decays at LHCb ( $V_{ub}$ )**

*Tuesday, 3 May 2016 14:50 (20)*

### **Summary**

**Presenter(s)** : KHANJI, Basem (Universita & INFN, Milano-Bicocca (IT))

**Session Classification** : Semileptonic and rare decays

Contribution ID : 32

Type : **not specified**

## **Radiative electroweak penguin decays at LHCb**

*Tuesday, 3 May 2016 15:10 (20)*

### **Summary**

**Presenter(s)** : XU, Zhirui (Ecole Polytechnique Federale de Lausanne (CH))

**Session Classification** : Semileptonic and rare decays



Contribution ID : 33

Type : **not specified**

## **Hadronic uncertainties in semileptonic B decays**

*Tuesday, 3 May 2016 15:30 (30)*

### **Summary**

**Presenter(s)** : MARTIN CAMALICH, Jorge (Johannes Universitat Mainz)

**Session Classification** : Semileptonic and rare decays

Contribution ID : 34

Type : **not specified**

## **BSM fits for rare B decays**

*Tuesday, 3 May 2016 16:30 (30)*

### **Summary**

**Presenter(s)** : DESCOTES-GENON, Sébastien (CNRS)

**Session Classification** : Semileptonic and rare decays

Contribution ID : 35

Type : **not specified**

## **EW and radiative penguin transitions from B-factories**

*Tuesday, 3 May 2016 17:00 (20)*

### **Summary**

**Presenter(s) :** AKAR, Simon (CPPM, Aix-Marseille Université, CNRS/IN2P3, Marseille, France)

**Session Classification :** Semileptonic and rare decays

Contribution ID : 36

Type : **not specified**

## Very rare decays at LHCb

*Tuesday, 3 May 2016 17:20 (20)*

### Summary

**Presenter(s)** : EVANS, Hannah Mary (University of Cambridge (GB))

**Session Classification** : Semileptonic and rare decays

Contribution ID : 37

Type : **not specified**

## **Beyond the Standard Model**

*Tuesday, 3 May 2016 17:40 (30)*

### **Summary**

**Presenter(s)** : OKADA, Yasuhiro (KEK)

**Session Classification** : Semileptonic and rare decays

Contribution ID : **38**

Type : **not specified**

## **Lattice QCD**

*Monday, 2 May 2016 17:30 (30)*

### **Summary**

**Presenter(s)** : VAN DE WATER, Ruth (Brookhaven National Laboratory)

**Session Classification** : Lattice

Contribution ID : **39**

Type : **not specified**

## **Renaissance of kaon flavour physics**

*Wednesday, 4 May 2016 09:00 (30)*

### **Summary**

**Presenter(s)** : BURAS, Andrzej (Technical University Munich)

**Session Classification** : Kaons, EDM, LFV

Contribution ID : 40

Type : **not specified**

## NA62 results and prospects

*Wednesday, 4 May 2016 09:30 (20)*

### Summary

**Primary author(s)** : BUCCI, Francesca (Universita e INFN, Firenze (IT))

**Presenter(s)** : BUCCI, Francesca (Universita e INFN, Firenze (IT))

**Session Classification** : Kaons, EDM, LFV



Contribution ID : 41

Type : **not specified**

## **ISR and tau physics at B-factories**

*Wednesday, 4 May 2016 09:50 (20)*

### **Summary**

**Presenter(s)** : SEREDNYAKOV, Sergey

**Session Classification** : Kaons, EDM, LFV

Contribution ID : 42

Type : **not specified**

## **Theory of EDMs and LFV**

*Wednesday, 4 May 2016 10:10 (30)*

### **Summary**

**Presenter(s)** : JUNG, Martin (TUM IAS / Excellence Cluster Universe)

**Session Classification** : Kaons, EDM, LFV

Contribution ID : 43

Type : **not specified**

## **LFV experiments (MEG, ...)**

*Wednesday, 4 May 2016 11:10 (20)*

### **Summary**

**Presenter(s)** : LANCASTER, Mark (University College London (UK))

**Session Classification** : Kaons, EDM, LFV

Contribution ID : 44

Type : **not specified**

## **BelleII: physics and early measurements**

*Wednesday, 4 May 2016 12:10 (30)*

### **Summary**

**Presenter(s)** : SHIU, Sjing-Ge (National Taiwan University (TW))

**Session Classification** : Future programs

Contribution ID : 45

Type : **not specified**

## **LHCb Run 2 trigger performance**

*Wednesday, 4 May 2016 11:30 (20)*

### **Summary**

**Presenter(s)** : SCIASCIA, Barbara (INFN (IT))

**Session Classification** : Instrumentation

Contribution ID : 46

Type : **not specified**

## **D0-D0bar mixing and rare D decays as probes of NP**

*Thursday, 5 May 2016 09:00 (30)*

### **Summary**

**Presenter(s)** : PETROV, Alexey (Wayne State University)

**Session Classification** : Charm physics

Contribution ID : 47

Type : **not specified**

## **Charm CPV and rare decays at LHCb**

*Thursday, 5 May 2016 09:30 (20)*

### **Summary**

**Presenter(s)** : MORELLO, Michael J. (SNS and INFN-Pisa (IT))

**Session Classification** : Charm physics

Contribution ID : 48

Type : **not specified**

## **Charm at B-factories**

*Thursday, 5 May 2016 09:50 (20)*

### **Summary**

**Presenter(s)** : LI, LongKe

**Session Classification** : Charm physics



Contribution ID : 49

Type : **not specified**

## **Charm at BESIII**

*Thursday, 5 May 2016 10:10 (20)*

### **Summary**

**Presenter(s)** : LI, Peirong

**Session Classification** : Charm physics

Contribution ID : 50

Type : **not specified**

## **Non-leptonic D decays**

*Thursday, 5 May 2016 10:50 (30)*

### **Summary**

**Presenter(s)** : Dr SCHACHT, Stefan (Karlsruhe Institute of Technology (KIT))

**Session Classification** : Charm physics

Contribution ID : 51

Type : **not specified**

## **Heavy flavour production at ATLAS**

*Thursday, 5 May 2016 11:20 (20)*

### **Summary**

**Presenter(s)** : WALDER, James William (Lancaster University (GB))

**Session Classification** : Heavy flavor production

Contribution ID : 52

Type : **not specified**

## **Heavy flavour production at CMS**

*Thursday, 5 May 2016 11:40 (20)*

### **Summary**

**Presenter(s)** : NEGRO, Giulia (CEA/IRFU,Centre d'étude de Saclay Gif-sur-Yvette (FR))

**Session Classification** : Heavy flavor production

Contribution ID : 53

Type : **not specified**

## **Heavy flavour production at LHCb**

*Thursday, 5 May 2016 12:00 (20)*

### **Summary**

**Presenter(s)** : BARSUK, Sergey (Laboratoire de l'Accelérateur Lineaire (FR))

**Session Classification** : Heavy flavor production

Contribution ID : 54

Type : **not specified**

## **Heavy flavour production in ion collisions**

*Thursday, 5 May 2016 12:20 (20)*

### **Summary**

**Presenter(s)** : PRINO, Francesco (Universita e INFN Torino (IT))

**Session Classification** : Heavy flavor production

Contribution ID : 55

Type : **not specified**

## **Theoretical overview on CP violation**

*Thursday, 5 May 2016 14:00 (30)*

### **Summary**

**Presenter(s)** : CHARLES, Jérôme (CPT Marseille)

**Session Classification** : CP violation including gamma

Contribution ID : 56

Type : **not specified**

## **Gamma measurements at LHCb**

*Thursday, 5 May 2016 14:30 (20)*

### **Summary**

**Presenter(s)** : CHEUNG, Faye (University of Oxford (GB))

**Session Classification** : CP violation including gamma



Contribution ID : 57

Type : **not specified**

## **Hadronic B/Bs decays results (including CPV, gamma) at B-factories**

*Thursday, 5 May 2016 14:50 (20)*

### **Summary**

**Presenter(s)** : MOHANTY, Gagan (Tata Inst. of Fundamental Research (IN))

**Session Classification** : CP violation including gamma

Contribution ID : 58

Type : **not specified**

## **Charmless B decays at LHCb**

*Thursday, 5 May 2016 15:10 (20)*

### **Summary**

**Presenter(s)** : EKLUND, Lars (University of Glasgow (GB))

**Session Classification** : CP violation including gamma

Contribution ID : 59

Type : **not specified**

## **Multibody charmless b-hadron decays**

*Thursday, 5 May 2016 15:30 (20)*

### **Summary**

**Presenter(s)** : DUJANY, Giulio (University of Manchester (GB))

**Session Classification** : CP violation including gamma

Contribution ID : **60**

Type : **not specified**

## **B decays to open charm**

*Thursday, 5 May 2016 16:30 (20)*

### **Summary**

**Presenter(s)** : HAINES, Susan Carol (University of Cambridge (GB))

**Session Classification** : CP violation including gamma

Contribution ID : 61

Type : **not specified**

## **B hadron properties (lifetimes, BR and polarisation, b-baryons, Bc, ...)**

*Thursday, 5 May 2016 16:50 (20)*

### **Summary**

**Presenter(s)** : HEREDIA DE LA CRUZ, Ivan (Centro Invest. Estudios Avanz. IPN (MX))

**Session Classification** : b-hadrons properties

Contribution ID : 62

Type : **not specified**

## **b-hadrons decays at ATLAS**

*Thursday, 5 May 2016 17:10 (20)*

### **Summary**

**Presenter(s)** : TURCHIKHIN, Semen (M.V. Lomonosov Moscow State University (RU))

**Session Classification** : b-hadrons properties

Contribution ID : 63

Type : **not specified**

## **b-hadrons decays at LHCb**

*Thursday, 5 May 2016 17:30 (20)*

### **Summary**

**Presenter(s)** : POLUEKTOV, Anton (University of Warwick (GB))

**Session Classification** : b-hadrons properties

Contribution ID : 64

Type : **not specified**

## **LHCb upgrade**

*Thursday, 5 May 2016 17:50 (20)*

### **Summary**

**Presenter(s)** : SIMI, Gabriele (Universita e INFN, Padova (IT))

**Session Classification** : Future programs



Contribution ID : 65

Type : **not specified**

## **SuperKEKB, Beast and BelleII prospects**

*Friday, 6 May 2016 09:00 (30)*

### **Summary**

**Presenter(s)** : NAYAK, Minakshi (Indian Institute of Technology Madras)

**Session Classification** : Future programs

Contribution ID : **66**

Type : **not specified**

## **LHCb long term plans beyond the current upgrade**

*Friday, 6 May 2016 10:10 (20)*

### **Summary**

**Presenter(s)** : TEUBERT, Frederic (CERN)

**Session Classification** : Future programs

Contribution ID : 67

Type : **not specified**

## **ATLAS future upgrade**

*Friday, 6 May 2016 09:30 (20)*

### **Summary**

**Presenter(s)** : VANKOV, Peter (Nikhef National institute for subatomic physics (NL))

**Session Classification** : Future programs

Contribution ID : **68**

Type : **not specified**

## **B physics with CMS upgraded detector**

*Friday, 6 May 2016 09:50 (20)*

### **Summary**

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

**Session Classification** : Future programs

Contribution ID : **69**

Type : **not specified**

## **Extreme flavor factories (FCC, ...)**

*Friday, 6 May 2016 10:50 (20)*

### **Summary**

**Presenter(s)** : MONTEIL, Stephane (Univ. Blaise Pascal Clermont-Fe. II (FR))

**Session Classification** : Future programs

Contribution ID : 70

Type : **not specified**

## **Precise measurement of the branching fraction of $B^0$ to $D^{*3}\pi$**

*Tuesday, 3 May 2016 12:05 (5)*

### **Summary**

**Presenter(s)** : WANG, LIANGLIANG

**Session Classification** : Poster session

Contribution ID : 71

Type : **not specified**

## **Measurement of CP violation and mixing in $B_s \rightarrow J/\psi \phi$ in ATLAS**

*Tuesday, 3 May 2016 12:15 (5)*

### **Summary**

**Presenter(s)** : JAKOUBEK, Tomas (Acad. of Sciences of the Czech Rep. (CZ))

**Session Classification** : Poster session

Contribution ID : 72

Type : **not specified**

## **ATLAS Topological Level-1 Trigger used in Run-2 for B0(s) to mu+mu- searches**

*Tuesday, 3 May 2016 12:20 (5)*

### **Summary**

**Presenter(s)** : DE SANCTIS, Umberto (University of Sussex (GB))

**Session Classification** : Poster session



Contribution ID : 73

Type : **not specified**

## **B\_c decays from highly improved staggered quarks and NRQCD**

*Tuesday, 3 May 2016 12:25 (5)*

We use both non-relativistic QCD (NRQCD) and fully relativistic formalisms to calculate semileptonic form factors for the decays  $B_c \rightarrow \eta_c \ell \nu$  and  $B_c \rightarrow J/\psi \ell \nu$  over the entire  $q^2$  range. To achieve this we employ a highly improved lattice quark action and at several lattice spacings down to  $a=0.044$  fm, which allow a fully relativistic treatment of charm and simulation of the full  $q^2$  range with controlled continuum extrapolation. We have two ways of treating the b quark: either with an  $O(\alpha_s)$  improved NRQCD formalism or by extrapolating a heavy mass  $m_h$  to  $m_b$  in the relativistic formalism. We find good agreement between these approaches which provides an important cross-check of our results.

### **Summary**

**Presenter(s)** : LYTTLE, Andrew (University of Glasgow)

**Session Classification** : Poster session

Contribution ID : 74

Type : **not specified**

## Matching of gauge invariant dimension 6 operators for b to s and b to c transitions

*Tuesday, 3 May 2016 12:30 (5)*

New physics realized above the electroweak scale can be encoded in a model independent way in the Wilson coefficients of higher dimensional operators which are invariant under the Standard Model gauge group. In this talk, I present the matching of the  $SU(3)_C \times SU(2)_L \times U(1)_Y$  gauge invariant dim-6 operators on the standard B physics Hamiltonian relevant for b s and b c transitions. The matching is performed at the electroweak scale (after spontaneous symmetry breaking) by integrating out the top quark, W, Z and the Higgs particle. We first carried out the matching of the dim-6 operators that give a contribution at tree level to the low energy Hamiltonian. In a second step, we identified those gauge invariant operators that do not enter b s transitions already at tree level, but can give relevant one-loop matching effects.

### Summary

**Presenter(s)** : AEBISCHER, Jason (University of Bern)

**Session Classification** : Poster session

Contribution ID : 75

Type : **not specified**

## **Introduction to Beauty 2016 by the local chairman**

*Monday, 2 May 2016 09:00 (5)*

### **Summary**

**Presenter(s) :** LEROY, Olivier (CPPM, Aix Marseille Université, CNRS/IN2P3, Marseille, France)

**Session Classification :** Welcome

Contribution ID : 76

Type : **not specified**

## **Welcome by the CPPM director**

*Monday, 2 May 2016 09:05 (10)*

### **Summary**

**Presenter(s)** : KAJFASZ, Eric (Centre National de la Recherche Scientifique (FR))

**Session Classification** : Welcome