

Implications of LHCb measurements and future prospects

Report of Contributions

Contribution ID: 2

Type: **not specified**

Welcome

Tuesday, 4 November 2025 14:00 (5 minutes)

Presenters: BLANC, Fred (EPFL - Ecole Polytechnique Federale Lausanne (CH)); VIEITES DIAZ, Maria (Instituto Galego de Física de Altas Enerxías (IGFAE, USC))

Session Classification: Welcome

Contribution ID: 3

Type: **not specified**

LHCb Introduction

Tuesday, 4 November 2025 14:05 (25 minutes)

Presenter: LI, Peilian (University of Chinese Academy of Sciences)

Session Classification: Welcome

Contribution ID: **108**

Type: **not specified**

Theory Keynote

Friday, 7 November 2025 12:00 (45 minutes)

Presenter: BLANKE, Monika (Karlsruhe Institute of Technology)

Session Classification: Theory Keynote

Contribution ID: **109**

Type: **not specified**

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Session Classification: Session 2

Contribution ID: **110**

Type: **not specified**

Prospects of charged current in HL-LHC

Tuesday, 4 November 2025 15:30 (30 minutes)

Presenter: FRANCO SEVILLA, Manuel (University of Maryland (US))

Session Classification: Session 1

Contribution ID: 111

Type: **not specified**

CKM unitarity tests and differential measurements of semileptonic decays

Tuesday, 4 November 2025 14:30 (30 minutes)

Presenter: MARTEL, Lucas (University of Oxford (GB))

Session Classification: Session 1

Contribution ID: 112

Type: **not specified**

LFU tests with semileptonic decays at LHCb

Tuesday, 4 November 2025 15:00 (30 minutes)

Presenters: DE SIMONE, Patrizia (INFN e Laboratori Nazionali di Frascati (IT)); DE SIMONE, Patrizia (Istituto Nazionale Fisica Nucleare (IT))

Session Classification: Session 1

Contribution ID: 113

Type: **not specified**

Latest developments on FF determinations for $B \rightarrow D^*$ transitions

Tuesday, 4 November 2025 16:30 (30 minutes)

Presenter: BORDONE, Marzia (University of Zürich and CERN)

Session Classification: Session 1

Contribution ID: **114**

Type: **not specified**

Study of non-leptonic FCCC decays from arXiv:2411.09458

Tuesday, 4 November 2025 17:00 (30 minutes)

Presenter: MEISER, Stefan (Universitat de Barcelona)

Session Classification: Session 1

Contribution ID: **115**

Type: **not specified**

Lattice QCD calculations of hadron spectroscopy

Thursday, 6 November 2025 11:00 (30 minutes)

Author: PRELOVSEK, Sasa

Presenter: PRELOVSEK, Sasa

Session Classification: Session 4

Contribution ID: **116**

Type: **not specified**

Nature of XYZ states using Born–Oppenheimer EFT

Thursday, 6 November 2025 11:30 (30 minutes)

Author: BRAMBILLA, Nora

Presenter: BRAMBILLA, Nora

Session Classification: Session 4

Contribution ID: **117**

Type: **not specified**

Chiral EFT for Hadronic molecules

Thursday, 6 November 2025 12:00 (30 minutes)

Author: BARU, Vadim

Presenter: BARU, Vadim

Session Classification: Session 4

Contribution ID: **118**

Type: **not specified**

Baryon spectroscopy at LHCb

Thursday, 6 November 2025 09:00 (30 minutes)

Author: ZHANG, Chenjia (Peking University)

Presenter: ZHANG, Chenjia (Peking University)

Session Classification: Session 4

Contribution ID: **119**

Type: **not specified**

Meson spectroscopy at LHCb

Thursday, 6 November 2025 09:30 (30 minutes)

Author: MU, Zeqing (Peking University (CN))

Presenter: MU, Zeqing (Peking University (CN))

Session Classification: Session 4

Contribution ID: **120**

Type: **not specified**

Exotic hadron spectroscopy at LHCb

Thursday, 6 November 2025 10:00 (30 minutes)

Presenter: ROMOLINI, Gabriele (Universita e INFN, Ferrara (IT))

Session Classification: Session 4

Contribution ID: **121**

Type: **not specified**

Dark sector searches at LHCb

Wednesday, 5 November 2025 17:00 (30 minutes)

Presenter: MERLI, Andrea (EPFL - Ecole Polytechnique Federale Lausanne (CH))

Session Classification: Session 3

Contribution ID: **122**

Type: **not specified**

Theoretical developments on axion-like particles (ALPs)

Wednesday, 5 November 2025 16:30 (30 minutes)

Presenter: ALDA, Jorge (Università di Padova/INFN)

Session Classification: Session 3

Contribution ID: **123**

Type: **not specified**

Studies of QCD using jets and heavy quarks at LHCb

Wednesday, 5 November 2025 14:30 (30 minutes)

Presenter: COOKE, Naomi (University of Glasgow (GB))

Session Classification: Session 3

Contribution ID: **124**

Type: **not specified**

Recent developments for heavy quark and jet calculations

Wednesday, 5 November 2025 14:00 (30 minutes)

Presenter: STAGNITTO, Giovanni (Universita & INFN, Milano-Bicocca (IT))

Session Classification: Session 3

Contribution ID: 125

Type: **not specified**

New measurements of electroweak bosons at LHCb

Wednesday, 5 November 2025 16:00 (30 minutes)

Presenter: FARMER, Keira Gwyn (The University of Edinburgh (GB))

Session Classification: Session 3

Contribution ID: 126

Type: **not specified**

Implications of electroweak measurements for SMEFT predictions

Wednesday, 5 November 2025 15:00 (30 minutes)

Presenter: BIEKOETTER, Anke (KIT Karlsruhe)

Session Classification: Session 3

Contribution ID: 127

Type: **not specified**

Status of the CKM angle γ and charm measurement at LHCb

Wednesday, 5 November 2025 09:00 (30 minutes)

Presenter: EVANS, Timothy David (Nikhef National institute for subatomic physics (NL))

Session Classification: Session 2

Contribution ID: **128**

Type: **not specified**

Status of D mixing

Wednesday, 5 November 2025 09:30 (30 minutes)

Presenter: Mr DI PALMA, Roberto (Università Roma Tre, Infn, sezione di Roma Tre)

Session Classification: Session 2

Contribution ID: **129**

Type: **not specified**

Rare charm decays and CP violation

Wednesday, 5 November 2025 10:00 (30 minutes)

Presenter: SOLOMONIDI, Eleftheria (Paul Scherrer Institute)

Session Classification: Session 2

Contribution ID: **130**

Type: **not specified**

CP violation in multi-body B decays

Wednesday, 5 November 2025 11:00 (30 minutes)

Presenter: REYES-TORRECILLA, Alba (Universidad Complutense de Madrid and IPARCOS)

Session Classification: Session 2

Contribution ID: 131

Type: **not specified**

CP violation and mixing measurements in B meson decays to charmless and charmonium final states at LHCb

Wednesday, 5 November 2025 11:30 (30 minutes)

Presenter: WU, Yanxi (Peking University (CN))

Session Classification: Session 2

Contribution ID: 132

Type: **not specified**

CP violation measurements of b-baryon decays at LHCb

Wednesday, 5 November 2025 12:00 (30 minutes)

Presenter: HU, Xiaofan (Tsinghua University (CN))

Session Classification: Session 2

Contribution ID: 133

Type: **not specified**

$b \rightarrow sll$ decays at LHCb

Thursday, 6 November 2025 14:00 (30 minutes)

Presenter: LANGENBRUCH, Christoph Michael (Heidelberg University (DE))

Session Classification: Session 5

Contribution ID: 134

Type: **not specified**

Non-local effects in $b \rightarrow s \ell \ell$: lattice, continuum and pheno approaches

Thursday, 6 November 2025 14:30 (1 hour)

Presenters: TINARI, Arianna; GAGLIARDI, Giuseppe; MAHMOUDI, Nazila (Universite Claude Bernard Lyon I (FR))

Session Classification: Session 5

Contribution ID: 135

Type: **not specified**

Rare decays with electrons and photons in the final state at LHCb

Thursday, 6 November 2025 16:00 (30 minutes)

Presenter: BISHOP, Fionn (Centre National de la Recherche Scientifique (FR))

Session Classification: Session 5

Contribution ID: 136

Type: **not specified**

K $\rightarrow$ $\mu\mu$ at LHCb and the kaon CKM picture

Thursday, 6 November 2025 16:30 (30 minutes)

Presenter: DERY, Avital

Session Classification: Session 5

Contribution ID: **137**

Type: **not specified**

Very Rare Decays from strange to beauty at LHCb

Thursday, 6 November 2025 17:00 (30 minutes)

Presenter: FULGHESU, Tommaso (Aix Marseille Univ, CNRS/IN2P3, CPPM, Marseille, France)

Session Classification: Session 5

Contribution ID: 138

Type: **not specified**

Overview of hydrodynamic modeling of collective flow in collision systems and energies available at LHCb

Friday, 7 November 2025 09:00 (30 minutes)

Presenter: ZHAO, Wenbin (LBNL, Berkeley)

Session Classification: Session 6

Contribution ID: **139**

Type: **not specified**

Flow measurements at LHCb

Friday, 7 November 2025 09:30 (30 minutes)

Presenter: LIAN, Zhengchen (Tsinghua University (CN))

Session Classification: Session 6

Contribution ID: **140**

Type: **not specified**

Implications of ion collisions at LHCb to ab initio nuclear structure

Friday, 7 November 2025 10:00 (30 minutes)

Presenter: SOMÀ, Vittorio (IRFU/CEA)

Session Classification: Session 6

Contribution ID: **141**

Type: **not specified**

Quark-gluon plasma searches with quarkonia in LHCb

Friday, 7 November 2025 11:00 (30 minutes)

Presenter: DE ANGELIS, Camilla (Universita e INFN, Cagliari (IT))

Session Classification: Session 6

Contribution ID: 142

Type: **not specified**

LHCb impacts on nuclear parton distribution functions

Friday, 7 November 2025 11:30 (30 minutes)

Presenter: WISSMANN, Jan (Universität Münster)

Session Classification: Session 6