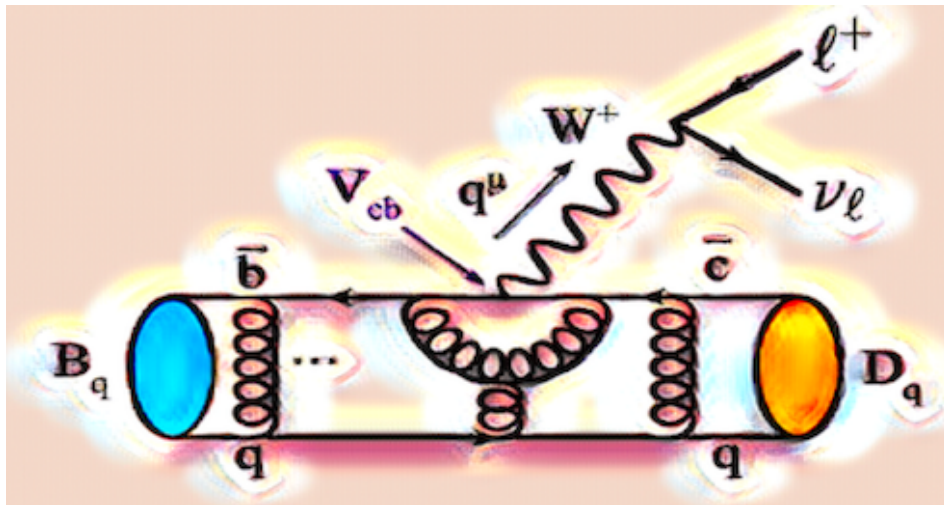


# Open LHCb Workshop on semileptonic exclusive $b \rightarrow c$ decays



## Report of Contributions

Contribution ID: 1

Type: **not specified**

# **General Seminar on Flavour Physics "The Flavor Puzzle as a Hint for Light New Physics in the Third Family"**

*Wednesday, 12 April 2023 14:30 (1 hour)*

**Presenter:** STEFANEK, Benjamin (University of Zurich)

Contribution ID: 2

Type: **not specified**

## **coffee break**

Contribution ID: 3

Type: **not specified**

## **coffee break**

Contribution ID: 4

Type: **not specified**

## **coffee break**

Contribution ID: 5

Type: **not specified**

## **lunch break**

Contribution ID: 6

Type: **not specified**

## **SM predictions on LFU and implications**

**Session Classification:** Exclusive  $b \rightarrow c$  semileptonic transitions

Contribution ID: 7

Type: **not specified**

## Measurements in LHCb

**Session Classification:** Exclusive  $b \rightarrow c$  semileptonic transitions



Contribution ID: 8

Type: **not specified**

## **Challenges in exclusive semileptonic decays**

**Session Classification:** Exclusive  $b \rightarrow c$  semileptonic transitions

Contribution ID: 9

Type: **not specified**

## Recent results from Lattice QCD

*Wednesday, 12 April 2023 16:30 (30 minutes)*

**Presenter:** VAQUERO, Alejandro (Universidad de Zaragoza)

**Session Classification:** Exclusive b->c semileptonic transitions

Contribution ID: **10**

Type: **not specified**

## **Results with unitarity based DM approach**

*Wednesday, 12 April 2023 17:00 (30 minutes)*

**Presenter:** VITTORIO, Ludovico (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Exclusive  $b \rightarrow c$  semileptonic transitions

Contribution ID: 11

Type: **not specified**

## **Exclusive semileptonic measurements and prospects at LHCb**

*Wednesday, 12 April 2023 17:30 (30 minutes)*

**Presenter:** VAZQUEZ GOMEZ, Ricardo (Universitat de Barcelona)

**Session Classification:** Exclusive  $b \rightarrow c$  semileptonic transitions

Contribution ID: 12

Type: **not specified**

## **Measurements of exclusive B semileptonic decays at Belle II**

*Wednesday, 12 April 2023 16:00 (30 minutes)*

**Presenter:** HORAK, Philipp (HEPHY Vienna)

**Session Classification:** Exclusive  $b \rightarrow c$  semileptonic transitions

Contribution ID: 13

Type: **not specified**

## **SM predictions on LFU and implications**

*Thursday, 13 April 2023 09:30 (30 minutes)*

**Presenter:** GUBERNARI, Nico (Siegen University)

**Session Classification:** Status of LFU tests in  $b \rightarrow c$  decays

Contribution ID: 14

Type: **not specified**

## **Current status of $R(D^{(*)})$ measurements in LHCb**

*Thursday, 13 April 2023 10:00 (30 minutes)*

**Presenter:** CIEZAREK, Gregory (CERN)

**Session Classification:** Status of LFU tests in  $b \rightarrow c$  decays

Contribution ID: 15

Type: **not specified**

## Measurements of LFU in $B \rightarrow D^{(*)} l \nu$ at B-Factories

*Thursday, 13 April 2023 10:30 (30 minutes)*

**Presenter:** HEDGES, Michael (Purdue University)

**Session Classification:** Status of LFU tests in  $b \rightarrow c$  decays



Contribution ID: 16

Type: **not specified**

## Exclusive $\bar{b} \rightarrow \bar{c} \ell \bar{\nu}$ transitions in and beyond the Standard Model

*Thursday, 13 April 2023 12:30 (30 minutes)*

**Presenter:** KOU, Emi (IJCLab)

**Session Classification:** Angular b->c analyses

Contribution ID: 17

Type: **not specified**

## Prospects on angular analysis at LHCb

**Presenter:** GRILLO, Lucia (University of Glasgow)

**Session Classification:** Angular b->c analyses

Contribution ID: **18**

Type: **not specified**

## **Measurements and prospects for $B \rightarrow D^* l \nu$ angular analysis at B-Factories**

*Thursday, 13 April 2023 12:00 (30 minutes)*

**Presenter:** BERNLOCHNER, Florian (University of Bonn)

**Session Classification:** Angular b->c analyses

Contribution ID: 19

Type: **not specified**

## **B->D\*\* theory**

**Session Classification:** Complementary Information and Measurements (external inputs and background)

Contribution ID: 20

Type: **not specified**

## **B->D\*\* decays experimental status @ Belle**

*Thursday, 13 April 2023 15:30 (30 minutes)*

**Presenter:** MEIER, Frank (Duke University)

**Session Classification:** Complementary Information and Measurements (external inputs and background)

Contribution ID: 21

Type: **not specified**

## **Double charm B-decays @ LHCb and b-factories**

*Thursday, 13 April 2023 16:00 (30 minutes)*

**Presenter:** POLUEKTOV, Anton (University of Warwick / BINP)

**Session Classification:** Complementary Information and Measurements (external inputs and background)

Contribution ID: 22

Type: **not specified**

## Charm decays @ BESIII

*Thursday, 13 April 2023 15:00 (30 minutes)*

**Presenter:** MEZZADRI, Giulio (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Complementary Information and Measurements (external inputs and background)

Contribution ID: 23

Type: **not specified**

## **Measurements of exclusive semileptonic $b \rightarrow c$ decays**

**Session Classification:** Ongoing analysis & common tools



Contribution ID: 24

Type: **not specified**

## Measurements of ratios R

**Session Classification:** Ongoing analysis & common tools

Contribution ID: 25

Type: **not specified**

## Lepton identification

**Session Classification:** Ongoing analysis & common tools

Contribution ID: 26

Type: **not specified**

## **Calibration samples with emphasis on soft tracks and photons**

**Session Classification:** Ongoing analysis & common tools

Contribution ID: 27

Type: **not specified**

## **Status of trigger lines: topological trigger**

**Session Classification:** Ongoing analysis & common tools

Contribution ID: 28

Type: **not specified**

## Neutral and charge isolation

**Session Classification:** Ongoing analysis & common tools

Contribution ID: 29

Type: **not specified**

## **Standard candles, "Early measurements"**

**Session Classification:** Ongoing analysis & common tools

Contribution ID: **30**

Type: **not specified**

## **Status of trigger lines: topological trigger**

**Session Classification:** Run3 tools

Contribution ID: **31**

Type: **not specified**

## Neutral and charge isolation

**Session Classification:** Run3 tools



Contribution ID: **32**

Type: **not specified**

## **Standard candles**

**Session Classification:** Run3 tools

Contribution ID: **33**

Type: **not specified**

## **LHCb closed session**

*Friday, 14 April 2023 09:30 (3 hours)*

Contribution ID: 34

Type: **not specified**

## **EvtGen model for $B \rightarrow D^* \ell \nu$ with New Physics**

*Thursday, 13 April 2023 16:50 (20 minutes)*

**Presenter:** MUKHERJEE, Lopamudra (Nankai University)

**Session Classification:** Common issues/tools

Contribution ID: 35

Type: **not specified**

## **Fitting tools: RooFit, HistFactory, HAMMER**

*Thursday, 13 April 2023 17:10 (20 minutes)*

**Presenter:** OWEN, Patrick (University of Zurich)

**Session Classification:** Common issues/tools

Contribution ID: 36

Type: **not specified**

## MC reweighting tools and Unfolding

*Thursday, 13 April 2023 17:30 (20 minutes)*

**Presenter:** PRIM, Markus (University of Bonn)

**Session Classification:** Common issues/tools

Contribution ID: 37

Type: **not specified**

## Opportunities with Bc semileptonic decays

*Thursday, 13 April 2023 11:30 (30 minutes)*

**Presenter:** DE FAZIO, Fulvia (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Status of LFU tests in  $b \rightarrow c$  decays

Contribution ID: **38**

Type: **not specified**

## Discussion

**Session Classification:** Common issues/tools

Contribution ID: 39

Type: **not specified**

## QED corrections

*Thursday, 13 April 2023 17:50 (20 minutes)*

**Presenter:** KLAVER, Suzanne (VU Amsterdam)

**Session Classification:** Common issues/tools



Contribution ID: 40

Type: **not specified**

## FLAG updates

*Thursday, 13 April 2023 16:30 (10 minutes)*

**Presenters:** VAQUERO, Alejandro (Universidad de Zaragoza); SIMULA, Silvano (Istituto Nazionale di Fisica Nucleare)

**Session Classification:** Complementary Information and Measurements (external inputs and background)

Contribution ID: 41

Type: **not specified**

## Prospect on angular analysis at LHCb

*Thursday, 13 April 2023 14:30 (30 minutes)*

**Presenter:** GRILLO, Lucia (University of Glasgow)

**Session Classification:** angular b->c analysis