

**LHC TOP WG meeting**

**Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Introduction

*Wednesday, November 9, 2022 1:00 PM (20 minutes)*

**Presenters:** Prof. MALTONI, Fabio (Universite Catholique de Louvain (UCL) (BE) and Università di Bologna); ALDAYA MARTIN, Maria (DESY); WAGNER, Wolfgang (Bergische Universitaet Wuppertal (DE))

Contribution ID: 2

Type: **not specified**

## **CMS-Highlight-1: First tt cross section measurement at 13.6 TeV**

*Wednesday, November 9, 2022 1:30 PM (20 minutes)*

**Presenter:** JEPPE, Laurids (Deutsches Elektronen-Synchrotron (DE))

Contribution ID: 3

Type: **not specified**

## **ATLAS-highlight-1: Measurement of differential cross-sections of $t\bar{t}$ production in the electron-muon channel with the full Run 2 data set**

*Wednesday, November 9, 2022 2:00 PM (20 minutes)*

**Presenter:** MARTINELLI, Luca (Sapienza Universita e INFN, Roma I (IT))

Contribution ID: 4

Type: **not specified**

## **ATLAS+CMS common MC simulation**

*Wednesday, November 9, 2022 2:30 PM (20 minutes)*

**Presenter:** SCHWIENHORST, Reinhard (Michigan State University (US))

Contribution ID: 5

Type: **not specified**

## **CMS-Highlight-2: Charge asymmetry in boosted tt events**

*Wednesday, November 9, 2022 3:30 PM (20 minutes)*

**Presenter:** ROY, Titas (University of Illinois at Chicago (US))

Contribution ID: 6

Type: **not specified**

## **ATLAS-highlight-2: charge asymmetries in $t\bar{t}$ , $t\bar{t}+\gamma$ and $t\bar{t}+W$ production**

*Wednesday, November 9, 2022 4:00 PM (20 minutes)*

**Presenter:** DIEZ PARDOS, Carmen (Universitaet Siegen (DE))

Contribution ID: 7

Type: **not specified**

## Discussion

Contribution ID: 8

Type: **not specified**

## Comparison of recent 4top results from ATLAS and CMS

*Wednesday, November 9, 2022 4:30 PM (20 minutes)*

**Presenters:** QIN, Quake (University of Manchester (GB)); WACHIRAPUSITANAND, Vichayanun (Chulalongkorn University (TH))

Contribution ID: 9

Type: **not specified**

## **Status and prospects on SM predictions for 4tops**

*Wednesday, November 9, 2022 5:30 PM (20 minutes)*

**Presenter:** KRAUS, Manfred (Florida State University)

Contribution ID: **10**

Type: **not specified**

## **The 4-top-quark BSM potential: resonant and non-resonant opportunities**

*Wednesday, November 9, 2022 5:00 PM (20 minutes)*

**Presenter:** DARME, Luc

Contribution ID: 11

Type: **not specified**

## “Radiation and recoil effects in top quark decays in Pythia” uncertainty in the context of top quark measurements

*Thursday, November 10, 2022 11:00 AM (20 minutes)*

**Presenter:** Prof. SKANDS, Peter (Monash University (AU))

Contribution ID: 12

Type: **not specified**

# Latest direct top-quark mass measurements from ATLAS

*Thursday, November 10, 2022 11:30 AM (20 minutes)*

**Presenter:** Mr JIMENEZ PENA, Javier (Max Planck Society (DE))

Contribution ID: 13

Type: **not specified**

## Latest results on colour reconnection in ATLAS and CMS

*Thursday, November 10, 2022 2:00 PM (20 minutes)*

**Presenters:** YAZGAN, Efe (National Taiwan University (TW)); WAHDAN, Shayma (Bergische Universität Wuppertal (DE))

Contribution ID: 14

Type: **not specified**

## **Energy-peak based method to measure top quark mass via B-hadron decay lengths**

*Thursday, November 10, 2022 2:30 PM (20 minutes)*

**Presenter:** FRANCESCHINI, Roberto (Rome 3 U.)

Contribution ID: 15

Type: **not specified**

## **Determination of the top-quark on-shell mass via the scale-invariant perturbative relation to its $\overline{\text{MS}}$ mass (2209.10777 [hep-ph])**

*Thursday, November 10, 2022 3:00 PM (20 minutes)*

**Presenter:** HUANG, Xu-Dong

Contribution ID: 16

Type: **not specified**

## **NNLO study of top-quark mass renormalization scheme uncertainties in Higgs boson production (arXiv:2206.14667 [hep-ph])**

*Thursday, November 10, 2022 4:00 PM (20 minutes)*

**Presenter:** MAZZITELLI, Javier (Paul Scherrer Institut (CH))

Contribution ID: 17

Type: **not specified**

**tbc**

Contribution ID: **18**

Type: **not specified**

## **Status of the Run 1 top-quark mass combination**

*Thursday, November 10, 2022 4:30 PM (20 minutes)*

**Presenter:** WIMPENNY, Steve (University of California Riverside (US))

Contribution ID: **19**

Type: **not specified**

## **CMS-Highlights-3**

Contribution ID: 20

Type: **not specified**

## **Probing Top-quark Operators with Precision Electroweak Measurements**

**Presenter:** LIU, Yiming

Contribution ID: 21

Type: **not specified**

## **Precise predictions for t-channel single-top production at the LHC and FCC**

*Friday, November 11, 2022 2:00 PM (20 minutes)*

**Presenter:** SIGNORILE-SIGNORILE, Chiara (Karlsruhe Institute of Technology (KIT))

Contribution ID: 22

Type: **not specified**

## **Semileptonic Decays in Off-shell Top Quark Production with $bb4l$**

*Friday, November 11, 2022 3:10 PM (20 minutes)*

**Presenter:** JEZO, Tomas (WWU ITP)

Contribution ID: 23

Type: **not specified**

## **Resonant top pair searches at the LHC: a window to electroweak phase transition**

*Friday, November 11, 2022 2:30 PM (20 minutes)*

**Presenter:** GONÇALVES, Dorival (Oklahoma State University)

Contribution ID: 24

Type: **not specified**

## Accessing CKM suppressed top decays at the LHC

*Friday, November 11, 2022 3:40 PM (20 minutes)*

**Presenter:** SZEWC, Manuel

Contribution ID: 25

Type: **not specified**

## **Status of the EFT effort of the LHC Top WG**