

# **Standard Model at the LHC 2020 (temporary)**

## **Report of Contributions**

Contribution ID: 2

Type: **not specified**

## **GIM-50 (50 years of Glashow–Iliopoulos–Maiani Mechanism)**

*Tuesday, 28 April 2020 10:00 (5h 40m)*

Contribution ID: 3

Type: **not specified**

## Hot topics in PDF fits

*Monday, 27 April 2020 09:00 (25 minutes)*

Role of jet and top data, higher-orders, modelling of experimental correlations

**Presenter:** NOCERA, Emanuele Roberto (Nikhef)

**Session Classification:** QCD

Contribution ID: 4

Type: **not specified**

## Recent results in NNLO and N3LO calculations

*Monday, 27 April 2020 09:25 (25 minutes)*

**Presenter:** CAOLA, Fabrizio (University of Oxford (GB))

**Session Classification:** QCD

Contribution ID: 5

Type: **not specified**

# Jet production and PDF/alphaS interpretations at the LHC

*Monday, 27 April 2020 09:50 (18 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** QCD

Contribution ID: 6

Type: **not specified**

# Jet Fragmentation and Central Exclusive Production at LHCb

*Monday, 27 April 2020 10:08 (18 minutes)*

**Presenter:** LHCb SPEAKER

**Session Classification:** QCD

Contribution ID: 7

Type: **not specified**

## **Progress in NLO EW Monte Carlo**

**Presenter:** TBC

**Session Classification:** EWK

Contribution ID: 8

Type: **not specified**

## **Electroweak corrections for precision weak mixing angle measurements at LHC**

**Presenter:** CHIESA, Mauro (University of Würzburg)

**Session Classification:** EWK



Contribution ID: 9

Type: **not specified**

## DY measurements/weak mixing angle

**Presenter:** ATLAS

**Session Classification:** EWK

Contribution ID: **10**

Type: **not specified**

## **Multiboson measurements**

**Presenter:** CMS

**Session Classification:** EWK

Contribution ID: 11

Type: **not specified**

## Lattice QCD inputs for SM

*Tuesday, 28 April 2020 09:00 (18 minutes)*

**Presenter:** TBD

**Session Classification:** Flavour

Contribution ID: 12

Type: **not specified**

## **Precise SM predictions for semi-leptonic B decays**

*Tuesday, 28 April 2020 09:18 (18 minutes)*

**Presenter:** BORDONE, Marzia (University of Zurich)

**Session Classification:** Flavour

Contribution ID: 13

Type: **not specified**

## **CKM measurements and hadronic form factors**

*Tuesday, 28 April 2020 09:36 (18 minutes)*

**Presenter:** LHCb

**Session Classification:** Flavour

Contribution ID: 14

Type: **not specified**

## Latest results on spectroscopy

*Tuesday, 28 April 2020 15:40 (18 minutes)*

**Presenter:** CMS SPEAKER

**Session Classification:** Flavour

Contribution ID: 15

Type: **not specified**

## **ATLAS/CMS CPV: new results & prospects**

*Tuesday, 28 April 2020 15:58 (18 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** Flavour

Contribution ID: 16

Type: **not specified**

## **New results on $b \rightarrow s \ell \ell$**

*Tuesday, 28 April 2020 16:16 (25 minutes)*

**Presenter:** LHCb SPEAKER

**Session Classification:** Flavour



Contribution ID: 17

Type: **not specified**

## **New Physics implications & connections with high- $p_T$ of recent B-physics data**

*Tuesday, 28 April 2020 16:41 (25 minutes)*

**Presenter:** MARZOCCA, David (INFN Trieste)

**Session Classification:** Flavour

Contribution ID: **18**

Type: **not specified**

## **CMS/ATLAS rare decays: new results & prospects**

*Tuesday, 28 April 2020 17:06 (25 minutes)*

**Presenter:** CMS SPEAKER

**Session Classification:** Flavour

Contribution ID: 19

Type: **not specified**

## **Belle 2 status & prospects**

*Tuesday, 28 April 2020 17:31 (15 minutes)*

**Presenter:** BELLEII SPEAKER

**Session Classification:** Flavour

Contribution ID: 20

Type: **not specified**

## Highlights and prospects from NA62

*Tuesday, 28 April 2020 17:46 (15 minutes)*

**Presenter:** NA62 SPEAKER

**Session Classification:** Flavour

Contribution ID: 21

Type: **not specified**

## **$t\bar{t}$ and single top: status and perspectives of precision predictions**

*Wednesday, 29 April 2020 09:00 (30 minutes)*

**Presenter:** PAGANI, Davide (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Top

Contribution ID: 22

Type: **not specified**

## **ATLAS/CMS latest results on $t\bar{t}$ and single-top cross-section measurements**

*Wednesday, 29 April 2020 09:30 (30 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** Top

Contribution ID: 23

Type: **not specified**

## **ATLAS/CMS Top properties**

*Wednesday, 29 April 2020 10:00 (30 minutes)*

**Presenter:** CMS SPEAKER

**Session Classification:** Top

Contribution ID: 24

Type: **not specified**

## **Top mass: “new observables? how to improve on or constrain the uncertainties”**

*Wednesday, 29 April 2020 10:30 (30 minutes)*

**Presenter:** TBD

**Session Classification:** Top



Contribution ID: 25

Type: **not specified**

## **ATLAS/CMS - latest results on tt+X (X=tt,bb,Z,W,gamma)**

*Wednesday, 29 April 2020 11:30 (23 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** Top-Higgs

Contribution ID: 26

Type: **not specified**

## **$tt+X$ ( $X=H,tt,bb,Z,W,\gamma$ ): status and perspectives of precision predictions**

*Wednesday, 29 April 2020 11:53 (23 minutes)*

**Presenter:** TSINIKOS, Ioannis (LU)

**Session Classification:** Top-Higgs

Contribution ID: 27

Type: **not specified**

## **Study of Higgs pT spectrum to probe the top couplings**

*Wednesday, 29 April 2020 12:16 (23 minutes)*

**Presenter:** SALVIONI, Ennio (CERN)

**Session Classification:** Top-Higgs

Contribution ID: 28

Type: **not specified**

## **ATLAS/CMS - latest results on tth/th**

*Wednesday, 29 April 2020 12:39 (23 minutes)*

**Presenter:** CMS SPEAKER

**Session Classification:** Top-Higgs

Contribution ID: 29

Type: **not specified**

## **State of the art in SM Higgs physics**

**Presenter:** TBD

**Session Classification:** Higgs

Contribution ID: **30**

Type: **not specified**

## **STXS vs. Fully fiducial measurements: limitations and possible future improvements**

**Presenter:** TBD

**Session Classification:** Higgs

Contribution ID: **31**

Type: **not specified**

## **Couplings and properties (incl. mass, CP): current status**

**Presenter:** ATLAS SPEAKER

**Session Classification:** Higgs

Contribution ID: 32

Type: **not specified**

## Rare SM Higgs channels (mumu, Za, cc)

*Wednesday, 29 April 2020 15:00 (30 minutes)*

**Presenter:** CMS SPEAKER

**Session Classification:** Higgs



Contribution ID: 33

Type: **not specified**

## BSM Higgs

**Presenter:** ATLAS SPEAKER

**Session Classification:** Higgs

Contribution ID: 34

Type: **not specified**

## **New experimental results - wildcard talk**

*Wednesday, 29 April 2020 15:30 (15 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** Higgs

Contribution ID: 35

Type: **not specified**

## **New experimental results - wildcard talk**

*Wednesday, 29 April 2020 15:45 (15 minutes)*

**Presenter:** CMS SPEAKER

**Session Classification:** Higgs

Contribution ID: 36

Type: **not specified**

## Higgs and flavour

**Presenter:** GRELJO, Admir (CERN)

**Session Classification:** Higgs

Contribution ID: 37

Type: **not specified**

## **Resonant and non-resonant HH channel**

*Thursday, 30 April 2020 09:30 (30 minutes)*

**Presenter:** CMS SPEAKER

**Session Classification:** Higgs

Contribution ID: **38**

Type: **not specified**

## Differential measurements

*Thursday, 30 April 2020 10:00 (30 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** Higgs

Contribution ID: 39

Type: **not specified**

## **Recent EFT developments: what we should be doing and why**

*Thursday, 30 April 2020 10:30 (30 minutes)*

**Presenter:** TBD

**Session Classification:** EFT

Contribution ID: 40

Type: **not specified**

## **Top plus Higgs: towards a global EFT fit**

*Thursday, 30 April 2020 11:30 (25 minutes)*

**Presenter:** VRYONIDOU, Eleni (CERN)

**Session Classification:** EFT



Contribution ID: 41

Type: **not specified**

## The global impact of EW+H SMEFT probes

*Thursday, 30 April 2020 11:55 (25 minutes)*

**Presenter:** BRIVIO, Ilaria (Universidad Autonoma de Madrid (ES))

**Session Classification:** EFT

Contribution ID: 42

Type: **not specified**

## **EFT measurements in the EW (+Higgs) sector**

*Thursday, 30 April 2020 12:20 (25 minutes)*

**Presenter:** CMS SPEAKER

**Session Classification:** EFT

Contribution ID: 43

Type: **not specified**

## **EFT measurements in the top +Higgs sector**

*Thursday, 30 April 2020 12:45 (25 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** EFT

Contribution ID: 44

Type: **not specified**

## The PDF and EFT Interplay

*Thursday, 30 April 2020 14:40 (25 minutes)*

**Presenter:** TBD

**Session Classification:** EFT

Contribution ID: 45

Type: **not specified**

## Low energy and flavour EFT probes

*Thursday, 30 April 2020 15:05 (25 minutes)*

**Presenter:** VALLI, Mauro (University of California, Irvine)

**Session Classification:** EFT

Contribution ID: 46

Type: **not specified**

## **EFT constraints with multi-dimensional and multi-variate techniques**

*Thursday, 30 April 2020 15:30 (25 minutes)*

**Presenter:** BANERJEE, Shankha (University of Durham (GB))

**Session Classification:** EFT

Contribution ID: 47

Type: **not specified**

## Rare SM Higgs channels (mumu, Za, cc)

**Presenter:** CMS SPEAKER

**Session Classification:** Higgs

Contribution ID: 48

Type: **not specified**

## BSM Higgs

*Thursday, 30 April 2020 09:00 (30 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** Higgs



Contribution ID: 49

Type: **not specified**

## **New experimental results - wildcard talk**

**Presenter:** ATLAS SPEAKER

**Session Classification:** Higgs

Contribution ID: 50

Type: **not specified**

## **New experimental results - wildcard talk**

**Presenter:** CMS SPEAKER

**Session Classification:** Higgs

Contribution ID: 51

Type: **not specified**

## Progress in NLO EW Monte Carlo

*Wednesday, 29 April 2020 16:30 (25 minutes)*

**Presenter:** ZARO, Marco (Università degli Studi e INFN Milano (IT))

**Session Classification:** EWK

Contribution ID: 52

Type: **not specified**

## **Electroweak corrections for precision weak mixing angle measurements at LHC**

*Wednesday, 29 April 2020 16:55 (25 minutes)*

**Presenter:** CHIESA, Mauro (University of Würzburg)

**Session Classification:** EWK

Contribution ID: 53

Type: **not specified**

## DY measurements/weak mixing angle

*Wednesday, 29 April 2020 17:20 (20 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** EWK

Contribution ID: 54

Type: **not specified**

## **Multiboson measurements**

*Wednesday, 29 April 2020 17:40 (20 minutes)*

**Presenter:** CMS SPEAKER

**Session Classification:** EWK

Contribution ID: 55

Type: **not specified**

## State of the art in SM Higgs physics

*Monday, 27 April 2020 16:42 (25 minutes)*

**Presenter:** MELNIKOV, Kirill

**Session Classification:** Higgs

Contribution ID: 56

Type: **not specified**

## **STXS vs. Fully fiducial measurements: limitations and possible future improvements**

*Monday, 27 April 2020 17:07 (25 minutes)*

**Presenter:** BERGER, Nicolas (Centre National de la Recherche Scientifique (FR))

**Session Classification:** Higgs



Contribution ID: 57

Type: **not specified**

## **Couplings and properties (incl. mass, CP): current status**

*Monday, 27 April 2020 17:32 (25 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** Higgs

Contribution ID: 58

Type: **not specified**

## **Role of mass corrections in pQCD calculations**

*Monday, 27 April 2020 10:26 (18 minutes)*

**Presenter:** NAPOLETANO, Davide (Universita & INFN, Milano-Bicocca (IT))

**Session Classification:** QCD

Contribution ID: 59

Type: **not specified**

## **Vector boson production in association with jets at the LHC**

*Monday, 27 April 2020 10:44 (18 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** QCD

Contribution ID: **60**

Type: **not specified**

## **Jet substructure (with possible ML) at the LHC**

*Monday, 27 April 2020 11:30 (23 minutes)*

**Presenter:** CMS SPEAKER

**Session Classification:** QCD

Contribution ID: 61

Type: **not specified**

## **Progress in MC event generators (with focus on NLL showers)**

*Monday, 27 April 2020 11:53 (23 minutes)*

**Presenter:** PRESTEL, Stefan (Fermi National Accelerator Laboratory)

**Session Classification:** QCD

Contribution ID: 62

Type: **not specified**

## **On the treatment of correlated theoretical uncertainties in LHC data analysis**

*Monday, 27 April 2020 12:16 (25 minutes)*

**Presenter:** POZZORINI, Stefano

**Session Classification:** EWK - QCD

Contribution ID: **63**

Type: **not specified**

## **W helicity/Differential Cross Sections**

*Monday, 27 April 2020 12:41 (19 minutes)*

**Presenter:** CMS SPEAKER

**Session Classification:** EWK - QCD

Contribution ID: **64**

Type: **not specified**

## **Theory aspects of low pt and W mass measurement**

*Monday, 27 April 2020 14:30 (18 minutes)*

**Presenter:** FERRERA, Giancarlo (Università degli Studi e INFN Milano (IT))

**Session Classification:** EWK - QCD



Contribution ID: 65

Type: **not specified**

## ATLAS Wildcard talk

*Monday, 27 April 2020 14:48 (15 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** EWK - QCD

Contribution ID: 66

Type: **not specified**

## **Status of theory predictions for diboson and multiboson production**

*Monday, 27 April 2020 15:03 (18 minutes)*

**Presenter:** LINDERT, Jonas

**Session Classification:** EWK - QCD

Contribution ID: 67

Type: **not specified**

## **QCD ( & MC) challenges for VBF/VBS measurements**

*Monday, 27 April 2020 15:21 (18 minutes)*

**Presenter:** PLAETZER, Simon (ITP, Universitaet Karlsruhe)

**Session Classification:** EWK - QCD

Contribution ID: **68**

Type: **not specified**

## **VBS/VBF Boson measurements**

*Monday, 27 April 2020 15:39 (18 minutes)*

**Presenter:** ATLAS SPEAKER

**Session Classification:** EWK - QCD

Contribution ID: **69**

Type: **not specified**

## **CMS Wildcard talk**

**Presenter:** CMS SPEAKER

**Session Classification:** EWK - QCD

Contribution ID: 70

Type: **not specified**

## **CMS experimental wildcard**

**Presenter:** CMS SPEAKER

**Session Classification:** Higgs

Contribution ID: 71

Type: **not specified**

## **CMS experimental wildcard**

*Monday, 27 April 2020 16:27 (15 minutes)*

**Session Classification:** EWK - QCD

Contribution ID: 72

Type: **not specified**

## Higgs and flavour

*Wednesday, 29 April 2020 14:30 (30 minutes)*

**Presenter:** GRELJO, Admir (CERN)

**Session Classification:** Higgs