

12th International Workshop on Top Quark Physics (TOP2019)



Report of Contributions

Contribution ID: 1

Type: **not specified**

Introduction by LOC

Monday, September 23, 2019 9:00 AM (5 minutes)

Presenter: LIAO, Hongbo (Chinese Academy of Sciences (CN))

Session Classification: Plenary session

Contribution ID: 2

Type: **not specified**

Welcome by the International Advisory Committee

Monday, September 23, 2019 9:05 AM (5 minutes)

Presenter: WAGNER, Wolfgang (Bergische Universitaet Wuppertal (DE))

Session Classification: Plenary session

Contribution ID: 3

Type: **not specified**

Overview of CMS results from last year: detector performance and physics highlights

Monday, September 23, 2019 11:00 AM (30 minutes)

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

Session Classification: Plenary session

Contribution ID: 4

Type: **not specified**

Inclusive $t\bar{t}$ + single top cross-section measurements

Monday, September 23, 2019 11:40 AM (20 minutes)

Presenter: ESCOBAR IBAÑEZ, Carlos (Instituto de Fisica Corpuscular (IFIC) - CSIC/UV)

Session Classification: Plenary session

Contribution ID: 5

Type: **not specified**

Inclusive $t\bar{t}$ + single top (standard modes) cross-section measurements

Session Classification: Plenary session

Contribution ID: 6

Type: **not specified**

Top-quark mass measurements

Monday, September 23, 2019 2:00 PM (30 minutes)

Presenter: CASTRO, Andrea (Universita e INFN, Bologna (IT))

Session Classification: Plenary session

Contribution ID: 7

Type: **not specified**

Top properties and anomalous couplings

Monday, September 23, 2019 3:20 PM (30 minutes)

Presenter: GOLDOUZIAN, Reza (University of Notre Dame (US))

Session Classification: Plenary session

Contribution ID: 8

Type: **not specified**

Rare single-top production modes

Tuesday, September 24, 2019 4:00 PM (20 minutes)

Presenter: CHOI, Su Yong (Korea University (KR))

Session Classification: Plenary session

Contribution ID: 9

Type: **not specified**

FCNC in production and decay

Session Classification: Plenary session

Contribution ID: **10**

Type: **not specified**

Modeling and tuning (ttbar) in ATLAS and CMS

Tuesday, September 24, 2019 9:00 AM (20 minutes)

Presenter: MACKAY, Catherine (Brunel University (GB))

Session Classification: Plenary session

Contribution ID: 11

Type: **not specified**

Modeling and tuning (single top + rare top processes)

Tuesday, September 24, 2019 11:00 AM (20 minutes)

Presenter: BERLENDIS, Simon (University of Arizona (US))

Session Classification: Plenary session

Contribution ID: 12

Type: **not specified**

Differential measurements of $t\bar{t}$ production

Tuesday, September 24, 2019 9:30 AM (20 minutes)

Presenter: BOISVERT, Veronique (Royal Holloway, University of London)

Session Classification: Plenary session

Contribution ID: 13

Type: **not specified**

Differential measurements of single top production

Tuesday, September 24, 2019 11:30 AM (20 minutes)

Presenter: SANCHEZ CRUZ, Sergio (Universidad de Oviedo (ES))

Session Classification: Plenary session

Contribution ID: 14

Type: **not specified**

Inclusive and differential tTbar + bBbar

Tuesday, September 24, 2019 2:00 PM (20 minutes)

Presenter: BROCHERO, Javier (Centro de Investigaciones Energéticas Medioambientales y Tecnológicas)

Session Classification: Plenary session

Contribution ID: 15

Type: **not specified**

$t\bar{T}$ + H and tH

Tuesday, September 24, 2019 2:30 PM (20 minutes)

Presenter: VAZQUEZ SCHROEDER, Tamara (CERN)

Session Classification: Plenary session

Contribution ID: 16

Type: **not specified**

Deep-neural-network based b-tagging as basis for improvements in top analyses

Tuesday, September 24, 2019 5:50 PM (5 minutes)

Presenter: GUTH, Manuel (Albert Ludwigs Universitaet Freiburg (DE))

Session Classification: Forum: Young Scientist Forum

Contribution ID: 17

Type: **not specified**

Measurement of the forward-backward asymmetry in $l+jets$

Tuesday, September 24, 2019 6:00 PM (5 minutes)

Presenter: CHEN, Pu-Sheng (National Taiwan University (TW))

Session Classification: Forum: Young Scientist Forum

Contribution ID: 18

Type: **not specified**

Measurements of inclusive and differential cross-sections of ttgam production in the e+mu final state at 13 TeV with the ATLAS detector

Tuesday, September 24, 2019 6:10 PM (5 minutes)

Presenter: ZOCH, Knut (Georg August Universitaet Goettingen (DE))

Session Classification: Forum: Young Scientist Forum

Contribution ID: 19

Type: **not specified**

Differential measurement of $t\bar{t}Z$ production in CMS

Tuesday, September 24, 2019 6:20 PM (5 minutes)

Presenter: KNOLLE, Joscha (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Forum: Young Scientist Forum

Contribution ID: 20

Type: **not specified**

Observation of the associated production of a top quark and a Z boson at $\sqrt{s}=13$ TeV with the ATLAS detector

Tuesday, September 24, 2019 6:30 PM (5 minutes)

Presenter: FRIZZELL, Dylan (University of Oklahoma (US))

Session Classification: Forum: Young Scientist Forum

Contribution ID: 21

Type: **not specified**

The first measurement of the running of the top quark mass

Tuesday, September 24, 2019 6:40 PM (5 minutes)

Presenter: DEFRANCHIS, Matteo (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Forum: Young Scientist Forum

Contribution ID: 22

Type: **not specified**

Top quarks and SUSY

Thursday, September 26, 2019 2:00 PM (20 minutes)

Presenter: MAJEWSKI, Stephanie (University of Oregon (US))

Session Classification: Plenary session

Contribution ID: 23

Type: **not specified**

Searches for vector-like top quarks and leptoquarks decaying to top quarks

Thursday, September 26, 2019 2:30 PM (30 minutes)

Presenter: NIKIFOROU, Nikiforos (University of Texas at Austin (US))

Session Classification: Plenary session

Contribution ID: 24

Type: **not specified**

Searches for $t\bar{t}$ and $t\bar{b}$ resonances in ATLAS and CMS

Thursday, September 26, 2019 4:10 PM (30 minutes)

Presenter: Mr CHATTERJEE, Suman (Tata Inst. of Fundamental Research (IN))

Session Classification: Plenary session

Contribution ID: 25

Type: **not specified**

Top-quarks and dark matter in ATLAS and CMS

Thursday, September 26, 2019 3:40 PM (20 minutes)

Presenter: SCHWANENBERGER, Christian (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Plenary session

Contribution ID: 26

Type: **not specified**

Inclusive and differential $t\bar{t}$ + gamma (EFT)

Friday, September 27, 2019 9:00 AM (20 minutes)

Presenter: LI, Yichen (DESY)

Session Classification: Plenary session

Contribution ID: 27

Type: **not specified**

Inclusive and differential $t\bar{t}$ + Z, W (EFT)

Friday, September 27, 2019 9:30 AM (20 minutes)

Presenter: YUMICEVA, Francisco (Florida Institute of Technology (US))

Session Classification: Plenary session

Contribution ID: 28

Type: **not specified**

Search for 4-top production (+ EFT)

Friday, September 27, 2019 11:00 AM (30 minutes)

Presenter: QIN, Yang (University of Manchester (GB))

Session Classification: Plenary session

Contribution ID: 29

Type: **not specified**

Top quarks at the HL-LHC

Friday, September 27, 2019 2:00 PM (30 minutes)

Presenter: TA, Duc Bao (Johannes Gutenberg Universität Mainz)

Session Classification: Plenary session

Contribution ID: **30**

Type: **not specified**

Experimental summary

Friday, September 27, 2019 4:00 PM (30 minutes)

Presenter: JUNG, Andreas (Purdue University (US))

Session Classification: Plenary session

Contribution ID: **31**

Type: **not specified**

Keynote address

Monday, September 23, 2019 9:10 AM (30 minutes)

Presenter: WANG, Liantao (University of Chicago (US))

Session Classification: Plenary session

Contribution ID: 32

Type: **not specified**

Top quarks at next-generation lepton colliders

Friday, September 27, 2019 2:40 PM (30 minutes)

Presenter: DURIEUX, Gauthier (Technion- Israel Institute of Technology (IL))

Session Classification: Plenary session

Contribution ID: **33**

Type: **not specified**

Theory summary

Friday, September 27, 2019 4:40 PM (30 minutes)

Presenter: REINA, Laura (Florida State University (US))

Session Classification: Plenary session

Contribution ID: **34**

Type: **not specified**

Announcement of TOP 2020

Tuesday, September 24, 2019 5:30 PM (5 minutes)

Presenter: MITOV, Alexander (University of Cambridge (GB))

Session Classification: Plenary session

Contribution ID: 35

Type: **not specified**

Overview of ATLAS results from last year: detector performance and physics highlights

Monday, September 23, 2019 9:50 AM (30 minutes)

Presenter: WIGLESWORTH, Craig (University of Copenhagen (DK))

Session Classification: Plenary session

Contribution ID: 36

Type: **not specified**

High precision theoretical predictions for on-shell top anti-top pair production at the LHC

Monday, September 23, 2019 12:05 PM (20 minutes)

Presenter: MAZZITELLI, Javier (Universitaet Zuerich (CH))

Session Classification: Plenary session

Contribution ID: 37

Type: **not specified**

Top quark mass at the LHC

Monday, September 23, 2019 2:40 PM (30 minutes)

Presenter: Prof. CZAKON, Michal Wiktor (Rheinisch Westfaelische Tech. Hoch. (DE))

Session Classification: Plenary session

Contribution ID: **38**

Type: **not specified**

FCNC in production and decay

Monday, September 23, 2019 4:00 PM (20 minutes)

Presenter: CASTRO, Nuno (LIP and University of Minho (PT))

Session Classification: Plenary session

Contribution ID: 39

Type: **not specified**

Parton shower and matching uncertainties in $t\bar{t}b\bar{b}$ production with Herwig7

Tuesday, September 24, 2019 10:00 AM (20 minutes)

Presenter: REUSCHLE, Christian (Florida State University)

Session Classification: Plenary session

Contribution ID: 40

Type: **not specified**

High precision theoretical predictions for single top production at the LHC

Tuesday, September 24, 2019 12:00 PM (20 minutes)

Presenter: LIU, Zelong (JGU Mainz)

Session Classification: Plenary session

Contribution ID: 41

Type: **not specified**

NLO QCD + EW theoretical predictions for ttH production at the LHC

Tuesday, September 24, 2019 3:00 PM (20 minutes)

Presenter: PELLEN, Mathieu (University of Cambridge)

Session Classification: Plenary session

Contribution ID: 42

Type: **not specified**

Modelling and uncertainties for $t\bar{t}b\bar{b}$ production as background to $t\bar{t}H(b\bar{b})$

Tuesday, September 24, 2019 4:30 PM (20 minutes)

Presenter: SIEGERT, Frank (Technische Universität Dresden (DE))

Session Classification: Plenary session

Contribution ID: 43

Type: **not specified**

$t\bar{t}$ + V production with $V = Z, \text{gamma}, W$ also in the context of SMEFT

Friday, September 27, 2019 10:00 AM (20 minutes)

Presenter: MIMASU, Ken (Université Catholique de Louvain)

Session Classification: Plenary session

Contribution ID: 44

Type: **not specified**

Recent theoretical studies of 4 top production, and BSM implications

Friday, September 27, 2019 11:40 AM (20 minutes)

Presenter: CAO, qinghong (Peking University)

Session Classification: Plenary session

Contribution ID: 45

Type: **not specified**

Triple Top-Quark Production at the LHC

Friday, September 27, 2019 12:10 PM (20 minutes)

Presenter: LIU, Yandong

Session Classification: Plenary session

Contribution ID: 46

Type: **not specified**

Over the top

Thursday, September 26, 2019 9:00 AM (20 minutes)

Presenter: TORRE, Riccardo (CERN)

Session Classification: Mini-workshop: Top Meets New Physics

Contribution ID: 47

Type: **not specified**

New physics models that connect top physics to cosmology and baryogenesis

Thursday, September 26, 2019 9:30 AM (20 minutes)

Presenter: MATSEDONSKYI, Oleksii (DESY Hamburg)

Session Classification: Mini-workshop: Top Meets New Physics

Contribution ID: 48

Type: **not specified**

Higgs-top coupling and its linkage with the electroweak phase transition

Thursday, September 26, 2019 10:00 AM (20 minutes)

Presenter: LIU, Tao (The Hong Kong University of Science and Technology (HK))

Session Classification: Mini-workshop: Top Meets New Physics

Contribution ID: 49

Type: **not specified**

High energy tops including boosted top tagging at the energy frontier

Thursday, September 26, 2019 11:00 AM (20 minutes)

Presenter: SON, Minho (Korea Advanced Institute of Science and Technology (KR))

Session Classification: Mini-workshop: Top Meets New Physics

Contribution ID: 50

Type: **not specified**

Top partners

Thursday, September 26, 2019 11:30 AM (20 minutes)

Presenter: VERHAAREN, Christopher (University of California, Davis)

Session Classification: Mini-workshop: Top Meets New Physics

Contribution ID: 51

Type: **not specified**

Continuum Naturalness

Thursday, September 26, 2019 12:00 PM (20 minutes)

Presenter: LEE, Gabriel (University of Chicago)

Session Classification: Mini-workshop: Top Meets New Physics

Contribution ID: 52

Type: **not specified**

High precision theoretical predictions for top anti-top pair production in di-lepton channel

Monday, September 23, 2019 12:35 PM (20 minutes)

Presenter: MITOV, Alexander (University of Cambridge (GB))

Session Classification: Plenary session

Contribution ID: 53

Type: **not specified**

Measurement of the total single-top-quark and single top-antiquark t-channel production cross sections at 13 TeV using the full Run 2 dataset

Presenter: BESSIDSKAIA BYLUND, Olga (Bergische Universitaet Wuppertal (DE))

Session Classification: Poster

Contribution ID: 54

Type: **not specified**

Search for new heavy vector boson in top-quark final states with the ATLAS detector

Monday, September 23, 2019 5:05 PM (5 minutes)

Presenter: YUAN, Rui (Shandong University (CN))

Session Classification: Poster

Contribution ID: 55

Type: **not specified**

Top quark mass measurement using leptonic invariant mass in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector

Monday, September 23, 2019 5:10 PM (5 minutes)

Presenter: WILKINS, Lewis (Royal Holloway, University of London (GB))

Session Classification: Poster

Contribution ID: 56

Type: **not specified**

Single- and double-differential cross-sections in $t\bar{t}$ final states in the lepton+jets channel

Monday, September 23, 2019 5:15 PM (5 minutes)

Presenter: KVITA, Jiri (Palacky University (CZ))

Session Classification: Poster

Contribution ID: 57

Type: **not specified**

Invariant mass distribution of top quark pairs near threshold

Monday, September 23, 2019 5:20 PM (5 minutes)

Presenters: WANG, Guoxing; XU, Yongqi

Session Classification: Poster

Contribution ID: 58

Type: **not specified**

Angular analyses of t-channel single top production and decay

Monday, September 23, 2019 5:25 PM (5 minutes)

Presenter: BI, Runyu (University of Pittsburgh (US))

Session Classification: Poster

Contribution ID: 59

Type: **not specified**

Search for FCNC interaction of tHq coupling in Higgs to bb channel with CMS Run2 data

Presenter: PARK, Jiwon (Hanyang University)

Session Classification: Poster

Contribution ID: **60**

Type: **not specified**

Probing top-quark flavor-changing couplings at the CEPC

Monday, September 23, 2019 5:35 PM (5 minutes)

Presenter: SHI, Liaoshan

Session Classification: Poster

Contribution ID: **61**

Type: **not specified**

Measuring the top quark's spin density matrix

Monday, September 23, 2019 5:40 PM (5 minutes)

Presenter: JUNG, Andreas (Purdue University (US))

Session Classification: Poster

Contribution ID: **62**

Type: **not specified**

Exotic decays of top partners: mind the search gap

Tuesday, September 24, 2019 5:00 PM (20 minutes)

Presenter: Dr ZHANG, mengchao (IBS-CTPU)

Session Classification: Plenary session

Contribution ID: **63**

Type: **not specified**

Announcement of TOP 2021

Tuesday, September 24, 2019 5:40 PM (5 minutes)

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

Session Classification: Plenary session

Contribution ID: 64

Type: **not specified**

Fully Bayesian Unfolding with Regularization

Monday, September 23, 2019 5:45 PM (5 minutes)

Presenter: BARON, Petr (Palacky University (CZ))

Session Classification: Poster

Contribution ID: 65

Type: **not specified**

Study of semi-boosted topology in top anti-top quark pair spectra

Monday, September 23, 2019 5:50 PM (5 minutes)

Presenter: PACALT, Josef (Palacky University (CZ))

Session Classification: Poster