

The 17th Workshop of the LHC Higgs Working Group - ONLINE ONLY

Report of Contributions

Contribution ID: 1

Type: **not specified**

ggF

Monday, 9 November 2020 13:40 (10 minutes)

Presenter: MISTLBERGER, Bernhard (SLAC National Accelerator Laboratory (US))

Session Classification: Introduction + WG1

Contribution ID: 2

Type: **not specified**

VBF: (Soft) QCD effects in VBF/VBS

Monday, 9 November 2020 13:55 (20 minutes)

Presenters: PLAETZER, Simon (ITP, Universitaet Karlsruhe); PLATZER, Simon

Session Classification: Introduction + WG1

Contribution ID: 3

Type: **not specified**

STXS uncertainties in VBF/VH/ttH bins

Tuesday, 10 November 2020 17:30 (20 minutes)

Presenter: HADDAD, Yacine (Northeastern University (US))

Session Classification: Cross cutting topics

Contribution ID: 4

Type: **not specified**

VH: experimental and theory review (*)

Monday, 9 November 2020 14:20 (20 minutes)

Zoom session for discussion during coffee break:

Meeting ID: 914 6209 0965 (Password of general zoom session)

Presenter: WINDISCHHOFER, Philipp (University of Oxford (GB))

Session Classification: Introduction + WG1

Contribution ID: 5

Type: **not specified**

VH theory and modelling

Session Classification: Introduction + WG1

Contribution ID: 6

Type: **not specified**

ttH: experimental new results and studies (*)

Monday, 9 November 2020 14:45 (15 minutes)

Zoom session for discussion during coffee break:

Meeting ID: 999 4846 4303 (Password of general zoom session)

Presenter: Dr MORENO LLACER, Maria (Univ. of Valencia and CSIC (ES))

Session Classification: Introduction + WG1

Contribution ID: 7

Type: **not specified**

ttH: theoretical studies of ttH backgrounds (*)

Monday, 9 November 2020 15:05 (15 minutes)

Zoom session for discussion during coffee break:

Meeting ID: 999 4846 4303 (Password of general zoom session)

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

Session Classification: Introduction + WG1

Contribution ID: 8

Type: **not specified**

Offshell: experimental result

Presenter: XU, Lailin (Brookhaven National Laboratory (US))

Session Classification: Introduction + WG1

Contribution ID: 9

Type: **not specified**

Offshell: theory and experimental developments (*)

Monday, 9 November 2020 15:25 (20 minutes)

Zoom session for discussion during coffee break:

Meeting ID: 835 1596 2230 (Password of general zoom session)

Presenter: RONTSCH, Raoul Horst

Session Classification: Introduction + WG1

Contribution ID: **10**

Type: **not specified**

PDFs: PDF4LHC20 (*)

Monday, 9 November 2020 13:15 (20 minutes)

Zoom session for discussion during coffee break:

Meeting ID: 936 3849 1822 (Password of general zoom session)

Presenter: HUSTON, Joey (Michigan State University (US))

Session Classification: Introduction + WG1

Contribution ID: **11**

Type: **not specified**

Introduction

Tuesday, 10 November 2020 13:00 (5 minutes)

Presenters: GOUSSIQU, Anna (University of Washington (US)); SPERKA, David (Boston University (US)); SLAVICH, Pietro (LPTHE Paris); LIU, Zhen (U of Maryland)

Session Classification: WG3

Contribution ID: **12**

Type: **not specified**

MSSM Subgroup Updates

Tuesday, 10 November 2020 13:05 (15 minutes)

Presenter: BAGNASCHI, Emanuele Angelo (Paul Scherrer Institute (CH))

Session Classification: WG3

Contribution ID: **13**

Type: **not specified**

MSSM Subgroup Updates

Tuesday, 10 November 2020 13:20 (15 minutes)

Presenter: GOTTMANN, Artur Il Darovic (KIT - Karlsruhe Institute of Technology (DE))

Session Classification: WG3

Contribution ID: 14

Type: **not specified**

NMSSM Subgroup Updates

Tuesday, 10 November 2020 13:40 (15 minutes)

Presenter: MUEHLLEITNER, Milada (Unknown)

Session Classification: WG3

Contribution ID: 15

Type: **not specified**

NMSSM Subgroup Updates

Tuesday, 10 November 2020 13:55 (15 minutes)

Presenter: BECHTEL, Janek (KIT - Karlsruhe Institute of Technology (DE))

Session Classification: WG3

Contribution ID: **16**

Type: **not specified**

Extended Higgs Sector Subgroup Updates

Tuesday, 10 November 2020 14:15 (15 minutes)

Presenter: SANTOS, Rui (University of Southampton and NExT Institute)

Session Classification: WG3

Contribution ID: 17

Type: **not specified**

Extended Higgs Sector Subgroup Updates

Tuesday, 10 November 2020 14:30 (15 minutes)

Presenter: ZIVKOVIC, Lidija (Institute of physics Belgrade (RS))

Session Classification: WG3

Contribution ID: **18**

Type: **not specified**

Exotic Higgs Decays Subgroup Updates

Tuesday, 10 November 2020 14:50 (25 minutes)

Presenter: KARAPOSTOLI, Georgia (University of California Riverside (US))

Session Classification: WG3

Contribution ID: **19**

Type: **not specified**

bbH Subgroup Updates

Tuesday, 10 November 2020 15:20 (20 minutes)

Presenter: MOHAMMADI, Abdollah (University of Wisconsin Madison (US))

Session Classification: WG3

Contribution ID: 20

Type: **not specified**

bbH contributed talk

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

Session Classification: WG3

Contribution ID: 21

Type: **not specified**

Introduction and recap of the 2020 activities in the HH group (30+10)

Wednesday, 11 November 2020 13:00 (30 minutes)

Presenter: FERRARI, Arnaud (Uppsala University (SE))

Session Classification: HH cross group

Contribution ID: 22

Type: **not specified**

HH experimental overview (30+10)

Wednesday, 11 November 2020 13:40 (30 minutes)

Presenter: CADAMURO, Luca (University of Florida (US))

Session Classification: HH cross group

Contribution ID: 23

Type: **not specified**

Higgs pair production in models with extended scalar sectors (20+5)

Wednesday, 11 November 2020 14:20 (20 minutes)

Presenter: MUHLLEITNER, Milada

Session Classification: HH cross group

Contribution ID: 24

Type: **not specified**

HH resonant production in VBF (20+5)

Wednesday, 11 November 2020 14:45 (20 minutes)

Presenter: BARMAN, Rahool

Session Classification: HH cross group

Contribution ID: 25

Type: **not specified**

Modelling of ggF HH+2j (20+5)

Wednesday, 11 November 2020 15:10 (20 minutes)

Presenters: HYNEMAN, Rachel Jordan (SLAC National Accelerator Laboratory (US)); HOH, Siewyan (Universita e INFN, Padova (IT))

Session Classification: HH cross group

Contribution ID: 26

Type: **not specified**

BSM Benchmarks for Effective Field Theories in Higgs and Electroweak Physics

Monday, 9 November 2020 16:10 (20 minutes)

Presenter: SANTIAGO, Jose (Granada University)

Session Classification: WG2

Contribution ID: 27

Type: **not specified**

High-energy probes of Higgs EFT interactions

Monday, 9 November 2020 16:35 (20 minutes)

Presenter: RIVA, Francesco

Session Classification: WG2

Contribution ID: 28

Type: **not specified**

Status of STXS (stage 1.2) and differential measurements

Monday, 9 November 2020 17:00 (20 minutes)

Presenters: YANG, Hongtao (Lawrence Berkeley National Lab. (US)); VILIANI, Lorenzo (Universita e INFN, Firenze (IT))

Session Classification: WG2

Contribution ID: 29

Type: **not specified**

Simplified template bins in Higgs decays

Monday, 9 November 2020 17:25 (20 minutes)

Presenter: DUEHRSEN-DEBLING, Michael (CERN)

Session Classification: WG2

Contribution ID: **30**

Type: **not specified**

EFT interpretation workflow: Introduction

Monday, 9 November 2020 17:50 (20 minutes)

Presenter: GILBERT, Andrew (Northwestern University (US))

Session Classification: WG2

Contribution ID: **31**

Type: **not specified**

EFT interpretation workflow: BSM perspective

Monday, 9 November 2020 18:15 (20 minutes)

Presenter: GROJEAN, Christophe (DESY (Hamburg) and Humboldt University (Berlin))

Session Classification: WG2

Contribution ID: 32

Type: **not specified**

EFT interpretation workflow: QCD, higher-orders and tools

Monday, 9 November 2020 18:40 (20 minutes)

Presenter: VRYONIDOU, Eleni

Session Classification: WG2

Contribution ID: 33

Type: **not specified**

Summary of the EFT WG workshop

Wednesday, 11 November 2020 16:10 (20 minutes)

Presenter: PETRUCCIANI, Giovanni (CERN)

Session Classification: Summary

Contribution ID: 34

Type: **not specified**

Higgs Boson Physics prospects at Snowmass-2021 planning exercise

Wednesday, 11 November 2020 16:35 (15 minutes)

Presenter: DAWSON, Sally (BNL)

Session Classification: Summary

Contribution ID: 35

Type: **not specified**

Summary and future plans of WG1

Wednesday, 11 November 2020 16:55 (20 minutes)

Presenter: CAMPBELL, John

Session Classification: Summary

Contribution ID: 36

Type: **not specified**

Summary and future plans of WG2 (*)

Wednesday, 11 November 2020 17:20 (20 minutes)

Zoom session for discussion during coffee break:

Meeting ID: 910 6935 9980 (Password of general zoom session)

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

Session Classification: Summary

Contribution ID: 37

Type: **not specified**

Summary and future plans of WG3

Wednesday, 11 November 2020 17:45 (20 minutes)

Presenter: LIU, Zhen (U of Maryland)

Session Classification: Summary

Contribution ID: **38**

Type: **not specified**

Summary and future plans of the HH cross group

Wednesday, 11 November 2020 18:10 (20 minutes)

Zoom session for discussion during coffee break:

Meeting ID: 893 6843 4922 (Password of general zoom session)

Presenter: GROEBER, Ramona (Università di Padova and INFN, Sezione di Padova)

Session Classification: Summary

Contribution ID: 39

Type: **not specified**

Final words of the workshop

Wednesday, 11 November 2020 18:35 (10 minutes)

Presenter: GRITSAN, Andrei (Johns Hopkins University (US))

Session Classification: Summary

Contribution ID: 40

Type: **not specified**

WG1 introduction

Monday, 9 November 2020 13:05 (5 minutes)

Presenters: CALDERON TAZON, Alicia (Universidad de Cantabria and CSIC (ES)); CAOLA, Fabrizio (University of Oxford (GB)); MARCHIORI, Giovanni (LPNHE Paris); CAMPBELL, John

Session Classification: Introduction + WG1

Contribution ID: 41

Type: **not specified**

ggF uncertainty

Tuesday, 10 November 2020 17:00 (20 minutes)

Presenters: LANGFORD, Jonathon Mark (Imperial College (GB)); ABIDI, Syed Haider (Brookhaven National Laboratory (US))

Session Classification: Cross cutting topics

Contribution ID: 42

Type: **not specified**

STXS EFT interpretation

Tuesday, 10 November 2020 18:00 (20 minutes)

Presenter: CUETO GOMEZ, Ana Rosario (Centre National de la Recherche Scientifique (FR))

Session Classification: Cross cutting topics

Contribution ID: 43

Type: **not specified**

Top mass scheme and scale uncertainties

Tuesday, 10 November 2020 16:30 (20 minutes)

Presenter: SPIRA, Michael (Paul Scherrer Institute (CH))

Session Classification: Cross cutting topics

Contribution ID: 44

Type: **not specified**

On the yb sensitivity of bbH

Tuesday, 10 November 2020 16:10 (15 minutes)

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

Session Classification: Cross cutting topics

Contribution ID: 45

Type: **not specified**

Higgs boson cross sections across a wide range of masses: use cases and plans

Tuesday, 10 November 2020 18:30 (30 minutes)

Presenters: CAOLA, Fabrizio (University of Oxford (GB)); PANICO, Giuliano (University of Florence and INFN Florence); SLAVICH, Pietro (LPTHE)

Session Classification: Cross cutting topics

Contribution ID: 46

Type: **not specified**

Welcome from the Steering Committee

Monday, 9 November 2020 13:00 (5 minutes)

Presenter: HARLANDER, Robert (CERN-TH)

Session Classification: Introduction + WG1