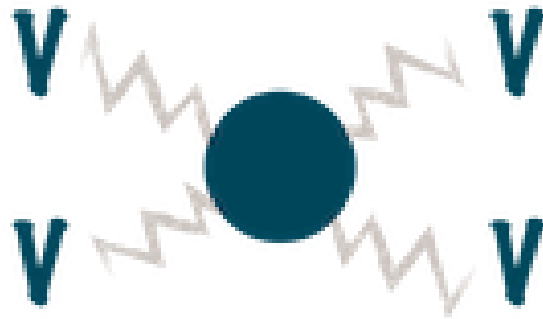


# Multi-Boson Interactions 2023



## Report of Contributions

Contribution ID: 1

Type: **not specified**

# Welcome

*Tuesday 29 August 2023 13:00 (30 minutes)*

**Presenter:** CHIVUKULA, R. Sekhar (UC San Diego)

Contribution ID: 2

Type: **not specified**

## Registration

Contribution ID: 3

Type: **not specified**

## Summary

*Friday 1 September 2023 11:00 (1 hour)*

**Presenter:** YUAN, C.-P. (Michigan State University)

**Session Classification:** Summary

Contribution ID: 4

Type: **not specified**

## **Multiboson physics with photons (Vg, Vgg, and VVg) in ATLAS**

*Thursday 31 August 2023 09:00 (30 minutes)*

**Presenter:** LAMBERT, Joseph Earl (University of Victoria (CA))

**Session Classification:** Electroweak/Higgs Multiboson Measurements

Contribution ID: 5

Type: **not specified**

## **Multiboson physics with photons (Vg, Vgg, and VVg) in CMS**

*Thursday 31 August 2023 10:45 (30 minutes)*

**Presenter:** LEVIN, Andrew Michael (Peking University (CN))

**Session Classification:** Electroweak/Higgs Multiboson Measurements

Contribution ID: 6

Type: **not specified**

## **Electroweak multiboson production in ATLAS**

*Wednesday 30 August 2023 14:00 (30 minutes)*

**Presenter:** ZHOU, Bing (University of Michigan (US))

**Session Classification:** Electroweak/Higgs Multiboson Measurements

Contribution ID: 7

Type: **not specified**

## **Electroweak multiboson production in CMS**

*Thursday 31 August 2023 15:30 (30 minutes)*

**Presenter:** PASPALAKI, Garyfallia (Purdue University (US))

**Session Classification:** Electroweak/Higgs Multiboson Measurements



Contribution ID: 8

Type: **not specified**

## **Studies of new Higgs boson interactions through nonresonant HH production in the $bb\bar{b}\bar{b}$ final state in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector**

*Thursday 31 August 2023 16:15 (20 minutes)*

**Presenter:** TISHELMAN-CHARNY, Abraham (Brookhaven National Laboratory (US))

**Session Classification:** Electroweak/Higgs Multiboson Measurements

Contribution ID: 9

Type: **not specified**

# Machine learning for hadronic multi-Higgs boson production

*Wednesday 30 August 2023 14:45 (20 minutes)*

**Presenter:** LI, Haoyang (Univ. of California San Diego (US))

**Session Classification:** Jets and Machine Learning

Contribution ID: **10**

Type: **not specified**

## **VBS opposite-sign WW in ATLAS**

*Thursday 31 August 2023 11:30 (20 minutes)*

**Presenter:** ROLAND, Christophe Pol A (Indiana University (US))

**Session Classification:** Electroweak/Higgs Multiboson Measurements

Contribution ID: 12

Type: **not specified**

## **Massive Diboson Measurements in ATLAS & CMS**

*Wednesday 30 August 2023 09:45 (30 minutes)*

**Presenter:** ATMASIDDHA, Prachi (University of Michigan, Ann Arbor)

**Session Classification:** Electroweak/Higgs Multiboson Measurements

Contribution ID: 13

Type: **not specified**

# **EFT searches in multiboson final states in ATLAS & CMS**

*Tuesday 29 August 2023 16:15 (30 minutes)*

**Presenter:** SCHMITT, Michael (Northwestern University (US))

**Session Classification:** Effective Field Theory

Contribution ID: 14

Type: **not specified**

## **Direct Searches for New Physics in Multiboson final states in ATLAS & CMS**

*Tuesday 29 August 2023 13:30 (30 minutes)*

**Presenter:** APYAN, Aram (Brandeis University (US))

**Session Classification:** New Physics

Contribution ID: 16

Type: **not specified**

## **Multi-Boson Events in the Light Exotics Effective Field Theory**

*Tuesday 29 August 2023 14:15 (30 minutes)*

**Presenters:** CARPENTER, Linda; CARPENTER, Linda (UC Irvine)

**Session Classification:** New Physics

Contribution ID: 17

Type: **not specified**

## **SMEFT NLO effects**

*Tuesday 29 August 2023 15:30 (30 minutes)*

**Presenter:** HOMILLER, Samuel (Harvard University)

**Session Classification:** Effective Field Theory



Contribution ID: **18**

Type: **not specified**

## **CMS off-shell Higgs boson measurements**

*Thursday 31 August 2023 09:45 (20 minutes)*

**Presenter:** SARICA, Ulascan (Univ. of California Santa Barbara (US))

**Session Classification:** Electroweak/Higgs Multiboson Measurements

Contribution ID: 19

Type: **not specified**

## Automatic matching tools

*Wednesday 30 August 2023 09:00 (30 minutes)*

**Presenters:** PAGES, Julie; PAGÈS, Julie (University of California, San Diego)

**Session Classification:** Effective Field Theory

Contribution ID: 20

Type: **not specified**

## **Interference resurrection in VBF dilepton production**

*Wednesday 30 August 2023 11:00 (30 minutes)*

**Presenter:** SON, Minho

**Session Classification:** Effective Field Theory

Contribution ID: 21

Type: **not specified**

## **Multiboson final states with Higgs bosons in ATLAS and CMS**

*Wednesday 30 August 2023 11:45 (30 minutes)*

**Presenter:** SARICA, Ulascan (Univ. of California Santa Barbara (US))

**Session Classification:** Electroweak/Higgs Multiboson Measurements

Contribution ID: 22

Type: **not specified**

## **Jet Substructure, Taggers, and Machine Learning**

*Thursday 31 August 2023 13:30 (30 minutes)*

**Presenter:** WHITESON, Daniel (University of California Irvine (US))

**Session Classification:** Jets and Machine Learning

Contribution ID: 23

Type: **not specified**

## **Multi-boson Production Sensitivity to Dimension-6 EFT Operators at the LHC**

*Thursday 31 August 2023 14:15 (30 minutes)*

**Presenter:** VAGNERINI, Antonio (University of Nebraska-Lincoln)

**Session Classification:** Effective Field Theory