

## Session Program

11-13 May 2026



## Phenomenology 2026 Symposium

### *Electroweak*

University of Pittsburgh

# Monday 11 May

14:15

## Electroweak: Higgs, top

**Session** | **Location:** David Lawrence Hall 106, University of Pittsburgh | **Convener:** Dorival Gonçalves

14:15–14:30 **ATLAS results on top quark mass and properties**

**Speaker**

Frederic Derue

14:30–14:45 **ATLAS results on associated top quark production (Top+X)**

**Speaker**

Lining Mao

14:45–15:00

**Higgs properties (mass, width, CP) and EFT measurements from ATLAS**

**Speaker**

Alex Zeng Wang

15:00–15:15

**Higgs boson production and decay rate measurements with the ATLAS experiment**

**Speaker**

Mira Varma

15:15–15:30 **HH, HHH searches, Higgs potential at the LHC**

**Speaker**

Romano Orlandini

15:30–15:45 **Beyond the Standard Model in the Higgs sector at ATLAS**

**Speaker**

Kevin Sedlaczek

15:45–16:00

**Searches for rare decays of the Higgs boson into light pseudoscalars in the CMS experiment.**

**Speaker**

Sweta Baradia

16:00

16:30

## Electroweak: precision

**Session** | **Location:** David Lawrence Hall 106, University of Pittsburgh

16:30–16:45 **The Whizard Monte Carlo and Top-Quark Physics**

**Speaker**

Wolfgang Kilian

16:45–17:00

**Determination of the strong coupling constant from the recent CT25 parton distribution functions**

**Speaker**

Kirtimaan Mohan

17:00–17:15

**Interplay of  $\alpha_s$ ,  $m_t$  and gluon parametrization in CT PDF extractions****Speaker**

Tanishq Sharma

17:15–17:30

**Investigation of the difference in the angular distributions of Z to  $\mu\mu$  events produced in quark-antiquark, quark-Gluon and Gluon-Gluon collisions****Speaker**

Giulia-Maria Bulugean

17:30–17:45

**Precision Measurement of the Electroweak Mixing Angle in the Region of the Z pole****Speaker**

Arie Bodek

17:45–18:00

**Fermionic Electroweak Two-Loop Corrections to Drell-Yan and Related Processes****Speaker**

Ernest Wallace

18:00–18:15

**Chasing 2HDM via electroweak corrections at e+e- colliders****Speaker**

Dr Yang Ma

18:15–18:30

**Hadronic CP Violation in the 2HDM****Speaker**

Daniil Volkov

18:30

## Tuesday 12 May

14:00

### Electroweak: Spin and QM

**Session** | **Location:** David Lawrence Hall 106, University of Pittsburgh

14:00–14:15

#### Quantum Observables and Higher-Order effects in Leptonic $h \rightarrow VV^{*}$ Decays

**Speaker**

Dorival Gonçalves

14:15–14:30

#### Higher-order corrections to quantum observables in semileptonic Higgs decays

**Speaker**

Alberto Navarro

14:30–14:45

#### Study of spin correlations in Higgs boson decays to four leptons at CMS

**Speaker**

Nicholas Pinto

14:45–15:00

#### Spin-Density Matrices as probes of CP violation in Top-Higgs Interactions

**Speaker**

Marcel I. Yanez

15:00–15:15

#### Decoherence or Recoherence in the Radiative Decay of Z boson

**Speaker**

Harman Singh

15:15–15:30

#### NLO EW Corrections and Spin Observables for $\gamma\gamma \rightarrow \tau^+\tau^-$ in Pb-Pb UPCs

**Speaker**

Peng-Cheng Lu

15:30–15:45

#### Quantum Tomography of Fermion Pairs in $e^+e^-$ Collisions: Longitudinal Beam Polarization Effects

**Speaker**

Youle Su

15:45–16:00

#### Leggett-Garg Inequality Violation with Muon g-2 Experiments

**Speaker**

Morgan Cassidy

16:00

16:30

### Electroweak

**Session** | **Location:** David Lawrence Hall 121, University of Pittsburgh

16:30–16:45

#### Electroweak PDFs for future lepton colliders

**Speaker**  
Krzysztof Mekala

16:45-17:00 **Single 2HDM Higgs Production at a Muon Collider**

**Speaker**  
Juhun Kwak

17:00-17:15 **Electroweak Restoration: SMEFT and HEFT**

**Speaker**  
Ishmam Mahbub

17:15-17:30 **A Busy Higgs Signal**

**Speaker**  
Peiran Li

17:30-17:45 **Probing light gauge bosons using the muon ( $g-2$ )**

**Speaker**  
Kushan Panchal

17:45-18:00

**The Smallness of Polarization Interference in Weak Boson Production at the LHC**

**Speaker**  
Richard Ruiz

18:00-18:15 **Multiboson Measurements at CMS**

**Speaker**  
Cole Erik Kampa

18:15-18:30 -

18:30