

## Session Program

19-21 May 2025



## Phenomenology 2025 Symposium

### *Electroweak*

University of Pittsburgh

# Monday 19 May

14:15

## Electroweak: g-2, BSM

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

14:15–14:45

### Mini-Review: Update on Muon g-2: White Paper Version 2

**Speaker**

thomas blum

14:45–15:00

### Weak bosons as partons below 10 TeV partonic center-of-momentum

**Speaker**

Richard Ruiz

15:00–15:15

### A Brief History of Mass

**Speaker**

Scott Willenbrock

15:15–15:30

### Dark gauge-mediated supersymmetry breaking

**Speaker**

Jiheon Lee

15:30–15:45

### Probing light gauge bosons using the muon (g-2)

**Speaker**

Kushan Panchal

15:45–16:00

### Colliding light to measure tau g-2

**Speaker**

Jesse Liu

16:00

16:30

## Electroweak: Top Quark, Leptons

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

16:30–16:45

### Latest New Physics Searches using Top Quarks at ATLAS

**Speaker**

Rongqian Qian

16:45–17:00

### ATLAS results on associated top quark production (Top+X)

**Speaker**

Nilima Nilesh Akolkar

17:00–17:15

### ATLAS results on top quark cross section measurements

**Speaker**

Laura Pintucci

17:15–17:30

### ATLAS results on top quark mass and properties

**Speaker**

Haruka Asada

17:30-17:45

**Search for heavy BSM particles coupling to third-generation quarks at CMS****Speaker**

Atanu Pathak

17:45-18:00

**Probing neutral Higgs Boson with all-top and same-sign top final states at LHC****Speaker**

Chenyu Fang

18:00-18:15

**Top tagging with Tensor network****Speaker**

Zhongtian Dong

18:15-18:30

**Latest New Physics Searches using Leptons at ATLAS****Speaker**

Emily Anne Thompson

18:30

## Tuesday 20 May

14:00

### Electroweak: Higgs, Vector Boson

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

14:00–14:15

#### Searches for Beyond Standard Model Higgs boson decays (including low mass resonances)

**Speaker**

Wasikul Islam

14:15–14:30

#### Recent diboson measurements in ATLAS

**Speaker**

Greg Myers

14:30–14:45

#### Recent results on measurements of the Higgs boson in ATLAS

**Speaker**

Man Yuan

14:45–15:00

#### Differential inclusive single W (also off-shell) measurements in ATLAS

**Speaker**

Jerry Ling

15:00–15:15

#### Recent VBS and Triboson Measurements in ATLAS

**Speaker**

Mark Neubauer

15:15–15:30

#### HH searches and Higgs-self couplings measurements by ATLAS

**Speaker**

Sayuka Kita

15:30–15:45

#### Recent Heavy resonances searches (including new scalars & BSM Higgs decays)

**Speaker**

Yuichiro Hayashi

15:45–16:00

#### Higgs CP properties and EFT measurements from ATLAS

**Speaker**

Cheng Jiang

16:00

14:00

### Electroweak: Quantum, EFT

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

14:00–14:30

#### Mini-review: Quantum Information Processing Meets Collider Physics

**Speakers**

Ian Low, Ian Low

14:30–14:45

#### Quantum Entanglement is Quantum: $h \rightarrow VV^*$

**Speaker**

dorival Gonçalves

14:45–15:00

**Quantum Information Observables at Lepton Colliders****Speaker**

Prof. Yu-Chen Guo

15:00–15:15

**Quantum Entanglement is Quantum: ZZ Production at the LHC****Speaker**

Alberto Navarro

15:15–15:30

**Entanglement maximization and mirror symmetry in Two-Higgs-Doublet-Models****Speaker**

Wanqiang Liu

15:30–15:45

**Renormalization Group Evolution and Phenomenology of Dimension-8 SMEFT****Speaker**

Supratim Das Bakshi

15:45–16:00

**General Form of Effective Operators from Hidden Sectors****Speaker**

Ina Flood

16:00

16:30

**Electroweak: Recent Results, Collider Physics****Session** | **Location:** David Lawrence Hall 106, University of Pittsburgh

16:30–16:45

**Unconventional Searches using the ATLAS Detector****Speaker**

Kenneth Johns

16:45–17:00

**Measurements of electroweak penguin decays at Belle and Belle II****Speaker**

. Renu

17:00–17:15

**Searches in CMS for long-lived particles****Speaker**

Pritam Palit

17:15–17:30

**Multiboson production in CMS****Speaker**

Kelci Ann Mohrman

17:30–17:45

**Searches for dark sector particles at Belle and Belle II****Speaker**

Haruki Kindo

17:45–18:00

**A general mass variable flavor number scheme for Z boson production in association with a heavy quark at hadron colliders**

**Speaker**

Keping Xie

18:00–18:15

**Probing a Quarkophobic  $\mathcal{W}^{\prime}$  at the High-Luminosity LHC via Vector Boson Fusion and Lorentz-Equivariant Point Cloud Learning****Speaker**

Umar Sohail Qureshi

18:15–18:30

**The Importance of Higgs Yukawa Measurements at the LHC: 2HDM and Beyond****Speaker**

Duncan Rocha

18:30