

Session Program

13-17 May 2024



DPF - PHENO 2024

Quark and Lepton Flavor Physics

University of Pittsburgh / Carnegie Mellon University

Monday 13 May

14:00

Quark and Lepton Flavor Physics: BSM Flavor Model

Session | **Location:** University of Pittsburgh, David Lawrence Hall 209 | **Convener:** Yousen Zhang

14:00–14:15 **Searching for Extra Higgs Bosons in the General 2HDM**

Speaker
George Wei-Shu Hou

14:15–14:30 **Baryon Number Violation Involving Tauons**

Speaker
Julian Heeck

14:30–14:45 **Phenomenologically Viable Froggatt-Nielsen Solutions to the Lepton Flavor Puzzle**

Speaker
Micah Mellors

14:45–15:00 **Lepton Flavor Violation by Two Units**

Speaker
Mikheil Sokhashvili

15:00–15:15 **Generalizing flavored (flavon-based) scalar potentials and their minima**

Speaker
Ming-Shau Liu

15:15–15:30 **UV imprints on muon-to-electron conversion**

Speaker
Tony Menzo

15:30

Tuesday 14 May

16:00

Quark and Lepton Flavor Physics: Techniques and Algorithms

Session | **Location:** University of Pittsburgh, David Lawrence Hall 104 | **Convener:** Gianantonio Pezzullo

16:00–16:15

Measurement of beam polarization at an e^+e^- $B\bar{B}$ -Factory with a new tau polarimetry technique

Speaker

Swagato Banerjee

16:15–16:30

Precession frequency analysis at Fermilab Muon g-2 Experiment

Speaker

Murong Cheng

16:30–16:45

Development of a Track-Trigger for Measuring the Antiproton Annihilation Cross-Section in the Mu2e Experiment at Fermilab

Speaker

Ethan Martinez

16:45–17:00

Performance of heavy-flavour jet identification algorithms in boosted topologies at the CMS experiment

Speaker

Matej Roguljic

17:00–17:15

Beyond Kinematics for Optimal Hadronic Top Quark Polarimetry I

Speaker

Alberto Navarro

17:15–17:30

Beyond Kinematics for Optimal Hadronic Top Quark Polarimetry II

Speaker

Zhongtian Dong

17:30

Wednesday 15 May

14:00

Quark and Lepton Flavor Physics: B decays

Session | **Location:** University of Pittsburgh, David Lawrence Hall 104 | **Convener:** Joachim Brod

14:00–14:15

Dark photon and dark Z mediated B meson decays

Speaker

Ahmed Rashed

14:15–14:30

An axion-like particle explanation of $B \rightarrow \pi K$ puzzle and $B \rightarrow K \nu \bar{\nu}$ excess

Speaker

Shibasis Roy

14:30–14:45

Dark and Heavy New Physics in $b \rightarrow s \nu \bar{\nu}$ decays

Speaker

Aditya Gadam

14:45–15:00

Anomalies in Hadronic B Decays

Speaker

Alexandre Jean

15:00–15:15

Tests of Lepton Flavor Universality in tree-level B Meson Decays at LHCb

Speaker

Alex Daniel Fernez

15:15–15:30

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15:30

16:00

Quark and Lepton Flavor Physics: Anomalies and Top Physics

Session | **Location:** University of Pittsburgh, David Lawrence Hall 104 | **Convener:** Xing Wang

16:00–16:15

Higher-order corrections for $t\bar{t}W$ production

Speaker

Nikolaos Kidonakis

16:15–16:30

Entanglement of top quarks

Speaker

Andreas Werner Jung

16:30–16:45

Is the Charm Heavy?

Speaker

Margarita Gavrilova

16:45–17:00

Measurement of top quark's charge asymmetry in boosted lepton+jets decays and EFT interpretation using Run2 CMS data

Speaker

Ricardo Escobar Franco

17:00–17:15

CP violation in tau decay into Kaons**Speaker**

Guglielmo Papiri

17:15–17:30

Revisiting θ -induced neutron EDM in QCD sum rule**Speaker**

Ting Gao

17:30