

Session Program

13-17 May 2024



DPF - PHENO 2024

Minisymposium

University of Pittsburgh / Carnegie Mellon University

Monday 13 May

14:00

Minisymposium: Charged lepton violation

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

14:00–14:30

Exploring the Frontiers: Experimental Endeavors in Charged Lepton Flavor Violation

Speaker

Gianantonio Pezzullo

14:30–14:45

The search for muon to positron conversion at Mu2e

Speaker

Michael Mackenzie

14:45–15:00

CLFV at e^+e^- experiments

Speaker

Swagato Banerjee

15:00–15:15

PIONEER: a next-generation rare pion decay experiment

Speaker

Yousen Zhang

15:15–15:30

Light new physics at Mu3e

Speaker

Kevin Langhoff

15:30

16:00

Minisymposium: Neutrino Science with the DUNE Experiment

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

16:00–16:22

Open questions in neutrino physics

Speaker

Patrick Huber

16:22–16:45

Status and Prospects of the DUNE Experiment

Speaker

Wei Shi

16:45–17:00

Deep-learning at DUNE Far Detector

Speaker

Prof. Jianming Bian

17:00–17:15

Neural Network Based Fast Optical Simulation Method in ProtoDUNE-VD

Speaker

Shuaixiang (Shu) Zhang

17:15–17:30

The ProtoDUNE experiment: past results and future plans

17:30

Speaker

Matthew Gar Jun Man

Tuesday 14 May

14:00

Minisymposium: quantum instrumentation

Session | **Location:** University of Pittsburgh, David Lawrence Hall 121 | **Convener:** Dr Silvia Zorzetti

14:00–14:30

Quantum Sensing for Fundamental Physics

Speaker

Anthony Brady

14:30–14:50

Radiation Sensing with Superconducting Transmon Qubits

Speaker

Tanay Roy

14:50–15:10

Quantum Measurement for Axion Dark Matter Searches

Speaker

Saptarshi Chaudhuri

15:10–15:30

Exploring Quantum Machine Learning for High-Energy Physics

Speakers

Jinghong Yang, Prof. Shabnam Jabeen

15:30

Wednesday 15 May

14:00

Minisymposium: 10 TeV center of mass

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

14:00–14:30

Muon Collider in the future of the Energy Frontier

Speaker

Sergo Jindariani

14:30–14:50

Maximising luminosity at the muon collider

Speaker

Chris Rogers

14:50–15:10

Muon Colliders for 10 TeV Center of Mass: The Accelerator and Collider

Speaker

J. Scott Berg

15:10–15:30

Detector and Machine-Detector Interface (MDI) Challenges

Speaker

Tova Ray Holmes

15:30

16:00

Minisymposium: forward physics

Session | **Location:** University of Pittsburgh, David Lawrence Hall 121 | **Convener:** Brian Thomas Batell

16:00–16:30

Multi-Messenger Collider Physics at the Forward Physics Facility

Speaker

Jonathan Lee Feng

16:30–16:45

FASER: recent results and perspectives

Speaker

Shih-Chieh Hsu

16:45–17:00

The Forward Liquid Argon Experiment at the Forward Physics Facility

Speaker

Prof. Jianming Bian

17:00–17:15

SND@LHC: Recent results and future prospects

Speaker

Oliver Lantwin

17:15–17:30

FORMOSA: looking forward to millicharged particles at the LHC

Speaker

Matt Joyce

17:30

Thursday 16 May

14:00

Minisymposium: Higgs factories

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

14:00–14:26 **Physics of Higgs factories**

Speaker

Christoph Paus

14:26–14:52 **Detector R&D for future e+e- colliders**

Speaker

Srini Rajagopalan

14:52–15:04 **The ILC physics program at energies above 250 GeV**

Speaker

Jan Strube

15:04–15:16

Constraining CP-odd contributions in the Higgs-strahlung process at FCC-ee using kinematic observables

Speaker

Nicholas Pinto

15:16–15:28 **FCC-ee sensitivity to SUSY through precision Z-boson measurements**

Speaker

Kevin Langhoff

15:30