

Session Program

7-9 Apr 2025

**IOP Joint APP and HEPP Annual Conference
2025**

Beyond the Standard Model

Cavendish Laboratory, University of Cambridge
JJ Thomson Avenue Cambridge CB3 0HE UK

Monday 7 April

16:00

Beyond the Standard Model: 1

Session | **Location:** Seminar West (A0.015W)

16:00–16:15 **Search for new physics in all-hadronic $t\bar{t}\bar{t}$ using ML**

Speaker

Shahzad Sanjrani

16:15–16:30 **First-Order Quantum Corrections to Fifth Forces**

Speaker

Michael Udemba

16:30–16:45 **The QSHS Haloscope, Axion Dark Matter, and Cavity Tuning**

Speaker

Mr Claude Mostyn

16:45–17:00

Searches for rare decays of B mesons into final states including four or six muons at LHCb

Speaker

Thomas Long

17:00–17:15 **Search for long-lived particles with the ATLAS muon spectrometer**

Speaker

Paul Jones

17:15–17:30 **The supersymmetric landscape after Run 2 ATLAS searches**

Speaker

Ben Hodkinson

17:30–17:45

Trigger-Level Analysis searches for dijet resonances produced in association with initial-state photons with Run 3 ATLAS data at the LHC

Speaker

Maximilian Amerl

17:45–18:00 **Search for displaced dimuons using Run 3 Data Scouting at CMS**

Speaker

Prijith Pradeep

18:00

Tuesday 8 April

13:30

Beyond the Standard Model: 2

Session | Location: Seminar West (A0.015W)

13:30-13:45

Development of a Retro-reflection Platform for the MAGIS and AION Experiments Towards Kilometre-scale Atom Interferometry

Speaker

Andrew Carroll

13:45-14:00

Preliminary results from the proANUBIS demonstrator with 104 fb-1 of Run 3 LHC data

Speaker

Anna Jane Mullin

14:00-14:15

Search for low-mass resonances decaying into two photons in a range between 66 GeV and 110 GeV with the ATLAS detector

Speaker

Cheng Jiang

14:15-14:30

A search for heavy neutral and charged BSM Higgs bosons in the bbWW final state at the ATLAS detector

Speaker

Rachel Ashby Pickering

14:30-14:45

Anomaly Detection techniques for New Physics searches at the ATLAS experiment

Speaker

Jennifer Curran

14:45-15:00

A new international effort to measure the neutron electric dipole moment

Speaker

W. Clark Griffith

15:00