

Session Program

7-9 Apr 2025

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

Detectors and Instrumentation

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

Monday 7 April

16:00

Detectors and Instrumentation: 1

Session | Location: Seminar East (A0.015E)

16:00-16:15 Muon Tracking in an Opaque Scintillator Detector with LiquidO

Speaker

Jess Lock

16:15-16:30

New Physics Studies at a Future Electron-Ion Collider Experiment: Study of Misalignment and Realignment for the High-Performance DIRC in Particle Identification

Speaker

Afaf Wasili

16:30-16:45

Adaptation of MINOS photomultipliers for low cost, large scale applications in contemporary particle physics experiments

Speaker

Alex Sells

16:45-17:00

Materials screening at Boulby Underground Laboratory

Speaker

Alice Hamer

17:00-17:15

Simulating LiquidO detectors for prototype research and development

Speaker

Ben Cattermole

17:15-17:30

Characterization of an ASIC-based readout system for the SAND experiment

Speaker

Dr Camilla Maggio

17:30-17:45

QUEST-DMC: Superfluid bolometer development for dark matter direct detection

Speaker

Elizabeth Leason

17:45-18:00

ITk Pixel Multi Module Readout Tests

Speaker

Juliette Martin

18:00

Tuesday 8 April

13:30

Detectors and Instrumentation: 2

Session | Location: Seminar East (A0.015E)

13:30-13:45

Inductively Coupled Plasma Mass Spectrometry at the Boulby Underground Laboratory.

Speaker

Sid Ahmed Maouloud

13:45-14:00

Performance and Monitoring of LUX-ZEPLIN's Outer Detector

Speaker

Megan Carter

14:00-14:15

Strong-field QED measurement tests at FACET-II using new electron detector concept

Speaker

Luke Hendriks

14:15-14:30

Characterisation of the next generation fast-timing photon-detectors

Speaker

Alexander Davidson

14:30-14:45

DarkSide-20k veto photodetector assembly

Speaker

Dr Ash Ritchie-Yates

14:45-15:00

Rotation compensation system for MAGIS-100 and measurement of laser pointing jitter

Speaker

Henry Throssell

15:00

Wednesday 9 April

11:00

Detectors and Instrumentation: 3

Session | Location: Seminar East (A0.015E)

11:00-11:15

Pixel Detector Development for Future Collider-Based Particle Physics Experiments

Speaker

Fuat Ustuner

11:15-11:30

Characterisation of Veto Photodetectors for DarkSide-20k: Cryogenic Testing Results

Speaker

Sudikshan Ravinthiran

11:30-11:45

Simulations of the Outer Detector for the XLZD Experiment

Speaker

Sean Hughes

11:45-12:00

BUTTON WbLS Detector development at Boulby underground Lab

Speaker

James Gooding

12:00-12:15

Designing new ultra-radiopure, high-strength electroformed Cu-based alloys, for rare event searches

Speaker

Dimitra Spathara

12:15-12:30

Enhancing Supernova Neutrino Detection in DUNE: Optimizing Pandora Reconstruction and Energy Estimation

Speaker

Matthew James Osbiston

12:30