

**Session Program**

**7-9 Apr 2025**

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

***Neutrino Physics***

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

# Tuesday 8 April

13:30

## Neutrino Physics: 1

**Session** | **Location:** Lecture Theatre (A2.001)

13:30–13:45 **Measuring Atmospheric Neutrino Mixing Without Unitarity**

**Speaker**

Rory Ramsden

13:45–14:00 **Using Stopping Cosmic Muons for Calibrations at DUNE**

**Speaker**

Alexandra Moor

14:00–14:15 **Central Value Spread Dial and Exploring the Shallow Inelastic Region**

**Speaker**

Callum Greg Cox

14:15–14:30

**The Pacific Ocean neutrino experiment: new developments and physics case**

**Speaker**

Beatrice Crudele

14:30–14:45 **Impact of flux systematics on ND fits**

**Speaker**

Koustubh APTE

14:45–15:00 **Neutron Backgrounds in the SuperNEMO Experiment**

**Speaker**

Sam Pratt

15:00

# Wednesday 9 April

11:00

## Neutrino Physics: 2

Session | Location: Lecture Theatre (A2.001)

11:00-11:15

### Simulated Data Studies for the T2K Experiment Neutrino Oscillation Analysis

**Speaker**

Adam Speers

11:15-11:30

### Constraining cross section uncertainties for a DUNE Long-baseline analysis

**Speaker**

Abigail Katharine Peake

11:30-11:45

### Investigating Neutrino-Nucleus Interactions: Inclusive Cross-Sections Across Various Materials at MINERvA

**Speaker**

Akeem Hart

11:45-12:00

### Performance Evaluation of the Muon Window for DUNE Near Detector

**Speaker**

Callum Reynolds

12:00-12:15

### Far-Detector Neutral Current $\text{Pi}_0$ Events for T2K's Oscillation Analysis

**Speaker**

Marvin Pfaff

12:15-12:30

### Constraining an Oscillation Analysis using Detector Systematics for the DUNE Liquid Argon Near Detector

**Speaker**

Tiago Tavares Alves

12:30