

Session Program

7-9 Apr 2025

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

Terrestrial Dark Matter Searches

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

Tuesday 8 April

13:30

Terrestrial Dark Matter Searches: 1

Session | **Location:** Ray Dolby Auditorium (A1.015-A2.015)

13:30-13:45 **Recent results from the LUX-ZEPLIN (LZ) dark matter experiment**

Speaker
Albert Baker

13:45-14:00 **Electron capture decays in the LUX-ZEPLIN (LZ) experiment**

Speaker
Olivia Valentino

14:00-14:15 **Waveform simulations for the LUX-ZEPLIN experiment**

Speaker
Mr Nicholas Fieldhouse

14:15-14:30

Towards a 0nbb decay search in the LUX-ZEPLIN experiment: mitigating gamma-ray backgrounds

Speaker
Elisa Elena Jacquet

14:30-14:45

Investigating the isolated S1 backgrounds in the LUX-ZEPLIN (LZ) experiment

Speaker
Linda Di Felice

14:45-15:00 **DD Reflector Neutrons as a Probe of Low Energy Xenon Microphysics**

Speaker
Jacopo Siniscalco

15:00

Wednesday 9 April

11:00

Terrestrial Dark Matter Searches: 2

Session | **Location:** Ray Dolby Auditorium (A1.015-A2.015)

11:00-11:15

The Environmental Monitoring Station: Measuring Cavern Backgrounds for the LUX-ZEPLIN experiment

Speaker

Ellie Bishop

11:15-11:30

The Latest Results on New Physics Searches in Low-Energy Electron Recoils from the LZ Experiment

Speaker

Dr Kaan Yuksel Oyulmaz

11:30-11:45

Prospects for non-standard low mass dark matter candidate searches with DarkSide-20k

Speaker

Conner Roberts

11:45-12:00

Commissioning of the MIGDAL detector with fast neutrons at ISIS/NILE

Speaker

Lex Millins

12:00-12:15

XLZD: the Next-Generation Liquid Xenon Rare-Event Observatory

Speaker

Alberto Uson

12:15-12:30

XLZD@Boulby: The Most Environmentally Sustainable Large-Scale Physics Experiment

Speaker

Dr Robert Renz Marcelo Gregorio

12:30