

Session Program

21-24 Sept 2026



LRT2026 - Low Radioactivity Techniques

Poster Session

The Guildhall, York, The Guildhall
The Courtyard, Guildhall, Coney St, York YO1 9QN United Kingdom

Tuesday 22 September

19:00

Poster Session

Session | **Location:** Merchant Adventurers Hall, The Hall, Fossgate, York YO1 9XD

19:00–19:01 **Radon emanation studies at the Boulby Underground Laboratory**

Speaker

Dr Alice Hamer

19:01–19:02

From caverns to classroom - Public Engagement at Boulby Underground Laboratory

Speaker

Jonathan Gutteridge

19:02–19:03

Introduction of CJPL and its low background facilities

Speaker

Wenhan Dai

19:03–19:04

Delayed Coincidence Based Active Suppression of In-Situ Muon-Induced Isotope Backgrounds in LEGEND

Speaker

Moritz Neuberger

19:04–19:05

In-situ Measurement of the Nuclear Recoil Background Rate in Ricochet

Speaker

Valentina Novati

19:05–19:06

Updates on Low-Background Counting at SURF

Speaker

Brianna Mount

19:06–19:07

Hydrofluoric acid-free Titanium etching for rare-event searches

Speaker

Patrick Knights

19:07–19:08

Shallow underground backgrounds and the Underground Counting Facility at Savannah River National Laboratory

Speaker

John Armstrong

19:08–19:09

Zone refining of NaI powder applied to the production of NaI(Tl) detectors for SABRE North

Speaker

Krzysztof Szczepaniec

19:09-19:10

Inductively Coupled Plasma Mass Spectrometry at the Boulby Underground Laboratory**Speaker**

Ms Kayleigh Johnson

19:10-19:11

Event Reconstruction and Detector Performance of the CROSS Experiment**Speaker**

Leonardo Perna

19:11-19:12

Laser-based production of GEM-like structures for cryogenic applications**Speaker**

Dr Kris Haverson

19:12-19:13

Developing radiopurity screening with alpha spectrometry**Speaker**

Christoph Seibt

19:13-19:14

Towards Low-Level Tritium Background Quantification**Speaker**

Stephanie Lyons

19:14-19:15

Experimental Study of Radon Solubility in Linear Alkylbenzene (LAB) for Low-Background Experiments**Speaker**

Odhongo Schephatia

19:15-19:16

Low radioactivity NaI(Tl) dark matter detectors with cryogenic SiPM matrices**Speaker**

Davide D'Angelo

19:16-19:17

Search for light WIMPs with the BULLKID-DM experiment using monolithic arrays of detectors**Speaker**

Kangkang Zhao

19:17-19:18

Cosmogenic activation of archeological Pb-based crystals at Chiplr neutron beamline for the RES-NOVA experiment**Speaker**

Simone Quitadamo

19:18-19:19

Neutron Backgrounds in the PICO 500 Detector**Speaker**

Rajan Anderson Dornan

19:19-19:20

The Twins: A dual-crystal HPGe system at the BHUC

Speaker

Dr Harkirat Riyat

19:20–19:21

Environmental gamma-ray measurements and radon correlation in Hall C at LNGS**Speaker**

Dr Vicente Pesudo

19:21–19:22

Investigating the keV Energy Frontier with CUORE: Axion and Rare-Event Searches.**Speaker**

Elena Ferri

19:22–19:23

Optimising GEANT4 event biasing for underground rare-event searches**Speaker**

Dr Lachlan Milligan

19:23–19:24

Results from underground operation of SABRE South at SUPL**Speaker**

Sai Pemmaraju

19:24–19:25

Radioactivities of AMoRE Crystals**Speaker**

Bijaya Sharma

19:25–19:26

CRAB: High precision characterization of the response of cryogenic detectors to sub-keV nuclear recoils**Speaker**

Corentin Doutre

19:26–19:27

Response of a nitrogen-filled spherical proportional counter to MeV-energy neutrons**Speaker**

Oceano

19:28–19:29

The LUX-ZEPLIN Outer Detector: Performance and Machine Learning Algorithms for Position Reconstruction**Speaker**

Tea Hall

19:29–19:30

A complete neutron-background model for the BUTTON-30 detector at Boulby mine**Speaker**

William Hopkins

19:30–19:31

External Gamma Background and Shielding Study for Cryogenic Bolometer $0\nu\beta\beta$ Experiments at CJPL

Speaker

Fang Xie

19:31–19:32

ELOISE - A workflow to characterize electronic background and detector response in cryogenic calorimeters in the sub-100 eV energy range**Speaker**

Holger Kluck

19:32–19:33

Latest Development of the Specialty Ultra-low Background Detector Manufacturing**Speaker**

Damian Ralet

19:33–19:34

Status of Cryogenic Bolometer R&D for Neutrinoless Double-Beta Decay Searches at CJPL**Speaker**

Fang Xie

19:34–19:35

The BUGS facility at Boulby**Speaker**

Ms Beth Green

19:35–19:36

GAIAS at LNGS: low-background crystal scintillators for precision beta spectroscopy**Speaker**

Vincenzo Caracciolo

19:36–19:37

ICP-MS analysis of radioactive contaminants in argon for rare-event searches**Speaker**

Roberto Santorelli

19:37–19:38

Accelerated ^{210}Pb Radon Plate-out for Detector Background Calibration in SuperCDMS**Speaker**

Nevena Cail

19:38–19:39

The way to zero background search with LEGEND-1000**Speaker**

Riccardo Biondi

19:39–19:40

Radon-Induced ^{210}Po Surface Contamination and Cleaning Studies on Copper for AMoRE-II**Speaker**

Daehoon Ha

19:40–19:41

Status and prospects of the DarkSide-20k experiment

Speaker

Michela Lai

19:41–19:42

Geant4 based simulations of backgrounds in the CRESST experiment**Speaker**

Samir Banik

19:42–19:43

Results and perspectives of the ACCESS project**Speaker**

Riccardo Elleboro

19:43–19:44

Rare-event searches with the CUPID-0 scintillating bolometer array**Speaker**

Livia Petrillo

19:44–19:45

remage: a modern simulation framework for low-background physics experiments**Speaker**

Luigi Pertoldi

22:00