

Session Program

1-5 Jun 2026



Identification of Dark Matter 2026

Parallel Session - Instrumentation for DM searches

Paraninfo, University of Zaragoza

Tuesday 2 June

15:00

Parallel Session - Instrumentation for DM searches

Session | **Location:** Pedro Cerbuna | **Convener:** Laura Seguí Iglesia

15:00–15:15

First demonstration of the superconducting quasiparticle amplifying transmon (SQUAT) detector architecture for THz/meV sensing

Speaker

Alex Droster

15:15–15:30

Calibration of Graphene-based Josephson Junction Detector for Dark Matter Search

Speaker

SEUNGHAN LEE

15:30–15:45

Understanding quasiparticle dynamics in a superconducting qubit through phonon burst-induced correlated errors

Speaker

Emanuela Celi

15:45–16:00

Low-Frequency Axion Searches with Near-Quantum-Limited SQUID Amplifiers: Towards a RADES experiment in BabyIAXO

Speaker

Dr Jose María García Barceló

16:00–16:15

Search for keV-Scale Sterile Neutrinos and Generalized Neutrino Interactions in Tritium β Decay with the LiFE-SNS Experiment

Speaker

Kyung-Rae Woo

16:15–16:30

Leveraging Quantum Sensors for Dark Matter Detection

Speaker

Daniel Baxter

16:30–16:45

The hunt for high frequency gravitational waves — GravNet: a global network of HFGW detectors

Speaker

Kristof Schmieden

16:45

17:10

Parallel Session - Instrumentation for DM searches

Session | **Location:** Pedro Cerbuna | **Convener:** Grzegorz Zuzel

17:10–17:25

Towards an International Radon Network for Dark Matter Experiments

Speaker

Robert Renz Marcelo Gregorio

17:25–17:40

Bedretto: A New Underground Laboratory for Fundamental Physics

Speaker

Alexander Kavner

17:40–17:55

The Modane Underground Laboratory

Speaker

Silvia Scorza

17:55–18:10

Mapping Environmental γ -Ray Flux at LNGS: Toward a Systematic Framework for Underground Laboratories

Speaker

Ludovico Luzzi

18:10–18:25

Boulby Underground Laboratory: Projects and plans at the UK's deep underground science facility

Speaker

Alice Hamer

18:50

Wednesday 3 June

15:00

Parallel Session - Instrumentation for DM searches

Session | **Location:** Pedro Cerbuna | **Convener:** Vicente Pesudo Fortes

15:00–15:15

The semiconductor technology for the Tesseract direct dark matter search experiment at LSM

Speaker

Juliette Blé

15:15–15:30

Towards the DELight Experiment: First Results from a Superfluid Helium R&D Cell

Speaker

Anna Bertolini

15:30–15:45

Towards ultra-low backgrounds for high-efficiency transition edge sensors in optical and infrared axion searches

Speaker

Manuel Meyer

15:45–16:00

Technology advances in the SuperCDMS HVeV program

Speaker

Aviv Simchony

16:00–16:15

Development of Cryogenic Single-Photon Detectors to Study the Light Output of Sodium Iodide Crystals for Rare Event Searches

Speaker

Lutz Ziegele

16:40

Thursday 4 June

11:30

Parallel Session - Instrumentation for DM searches

Session | Location: Pedro Cerbuna | Convener: Daniel Baxter

11:30–11:45 Infrared scintillation light in xenon

Speaker

Teresa Marrodan Undagoitia

11:45–12:00

Measurement of scintillation from proportional electron multiplication in liquid xenon

Speaker

Patrick Knights

12:00–12:15

Ultra-cold Argon-based Time Projection Chamber demonstrator with wavelength-shifting capable optical amplification structures

Speaker

Dr Pedro Costa e Silva

12:15–12:30

Time resolution for direct dark matter detection

Speaker

Hannah Danhel

12:30–12:45

Low-Cost Amplification and Readout Device for Directional Dark Matter Searches

Speaker

Alasdair McLean

12:45–13:00

An efficient method of tuning plasma haloscopes with spirals and concentric rings

Speaker

Jianyang Qi

13:00–13:15

Searches for millicharged particles at accelerator facilities with skipper-CCD detectors

Speaker

Brenda Cervantes

13:30

15:00

Parallel Session - Instrumentation for DM searches

Session | Location: Pedro Cerbuna | Convener: Silvia Scorza

15:00–15:15

Radiopurity and Cleanliness Control in next generation dark matter direct detection experiment, XLZD

Speaker

Ferdos Dastgiri

15:15–15:30**Performance of the Gd-loaded Water Cherenkov Neutron Veto in XENONnT****Speaker**

Emanuele Angelino

15:30–15:45**Radiogenic Neutron Background Calculation: Uncertainties of the (α ,n) Neutron Yields in Argon and New Cross-Section Measurement****Speaker**

Julian Guerrero Canovas

15:45–16:00**Underground environmental neutron flux measurement with the CYGNO project****Speaker**

Melba D'Astolfo

16:00–16:15**Development and performance of the PandaX veto system****Speaker**

Prof. Yuehuan Wei

16:15–16:30**Characterization of argon recoils at the keV scale with ReD and ReD+****Speaker**

Maximo David Ave Pernas

16:30–16:45**Modeling the low-energy accidental coincidence background in the LUX-ZEPLIN experiment****Speaker**

Ruben Coronel

16:45