

Session Program

1-5 Jun 2026



Identification of Dark Matter 2026

Parallel Session - Theory/Phenomenology

Paraninfo, University of Zaragoza

Monday 1 June

11:30

Parallel Session - Theory/Phenomenology

Session | **Location:** Pilar Sinués | **Convener:** Manuel Asorey

11:30–11:50 **SUSY Dark Matter Production at the LHC?!**

Speaker

Sven Heinemeyer

11:50–12:10 **Conversion-Driven Baryogenesis with Quark-Philic Flavored Dark Matter**

Speaker

Lena Rathmann

12:10–12:30 **The Dark Matter-Baryon Coincidence: Problem, Solutions, and Signatures**

Speaker

Yi Chung

12:30–12:50 **Beyond 3→2: Towards Realistic SIMP Dark Matter**

Speaker

Daniil Krichevskiy

12:50–13:10 **Wallions: Dark Matter from the Edge of Field Space**

Speaker

Mathias Becker

13:30

15:00

Parallel Session - Theory/Phenomenology

Session | **Location:** Pilar Sinués | **Convener:** Sven Heinemeyer

15:00–15:20 **Charged Sterile Neutrinos as Dark Matter**

Speaker

Halvor Melkild

15:20–15:40 **Dark higher-form portals and duality**

Speaker

Cypris Plantier

15:40–16:00

Combined constraints on dark photons from high-energy collisions, cosmology, and astrophysics

Speaker

Adrian William Romero Jorge

16:00–16:20

Gravitational dark matter production, its uncertainties, and its interplay with freeze-in

Speaker

Álvaro Parra López

16:20–16:40

What can flavour tell us about Dark Matter?**Speaker**

Xavier Ponce Diaz

16:40

17:10

Parallel Session - Theory/Phenomenology**Session** | **Location:** Pilar Sinués | **Convener:** David Cerdeño

17:10–17:30

Modeling electronic final states in liquid xenon for light dark matter detection**Speaker**

Theresa Backes

17:30–17:50

Precision Atomic Response Functions for Probing Dark Matter–Electron Scattering in Xenon and Germanium Detectors**Speaker**

Mukesh Kumar Pandey

17:50–18:10

Sub-GeV dark matter from cosmic ray bremsstrahlung in the atmosphere**Speaker**

Branden Aitken

18:10–18:30

Unitarity in the non-relativistic regime and implications for dark matter**Speaker**

Marcos Flores

18:30

Wednesday 3 June

15:00

16:40

Parallel Session - Theory/Phenomenology

Session | Location: Pilar Sinués | Convener: Sven Heinemeyer

15:00–15:20	Sub-GeV Dark Matter Searches at Spallation Neutron Sources
Speaker Dimitrios Papoulias	
15:20–15:40	Interactions of relativistic dark matter with nuclei and implications for light dark matter detection
Speaker Helena Kolesova	
15:40–16:00	Turning background into signal: solar neutrinos in xenon dark matter detectors
Speaker Michela Sestu	
16:00–16:20	The scalar coupling of the nucleon for direct detection of Dark Matter
Speaker Jose Manuel Alarcón	
16:20–16:40	Dark matter freeze-in at stronger coupling: observational prospects
Speaker Oleg Lebedev	

Thursday 4 June

15:00

Parallel Session - Theory/Phenomenology

Session | **Location:** Pilar Sinués | **Convener:** Sven Heinemeyer

15:00–15:20

Picolensing as a probe of massive compact dark objects

Speaker

Michael A. Fedderke

15:20–15:40

Charting the dark matter landscape with matter-wave interferometers

Speaker

Leonardo Badurina

15:40–16:00

Beyond standard dark matter phenomenology in terrestrial and space-based quantum sensors

Speaker

John Carlton

16:00–16:20

Direct Detection of CP Violation in Baryonic Dark Matter

Speaker

Pablo Figueroa

16:40