

Session Program

1-5 Dec 2025

**X ComHEP: Colombian Meeting on High
Energy Physics**

Dark Matter

Monday 1 December

09:00

Dark Matter

Session |

Location: Sede de Investigación Universitaria (SIU) - Universidad de Antioquia Calle 62 N.º 52 - 59 , Medellín - Colombia |

Convener: Oscar Zapata

09:00–09:45

Dark matter spikes as laboratories for Particle Physics

Speaker

Alejandro Ibarra

10:30

09:45–10:30

New Thermal Decoupling Windows to the Dark Sector

11:00

Dark Matter

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11:00–11:20

A Multi-component Dark Matter Interpretation of the Galactic Center GeV Excess

Speaker

Carlos E. Yaguna

11:20–11:40

Dark sector with fermion dark matter and a dark scalar.

Speaker

Amalia Betancur Rodriguez

11:40–12:00

Two dark matter candidates in a doublet-triplet Higgs model

Speaker

Sheryl Melara Duron

12:00

14:00

Dark Matter

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14:00–14:20

Pion dark matter in a θ vacuum: a thermal relic with sharp velocity-dependent self-interactions

Speaker

Oscar Zapata

14:20–14:40

Constraining Exothermic Dark Matter via Effective Theory in the PICO-60 Bubble Chamber

Speaker

Rajan Anderson Dornan

14:40-15:00

First-Order Phase Transitions in the Dark Sector

Speaker

Andres Gomez

15:00-15:20

Gravitational Waves from Electroweak Phase Transition in a Z6-Symmetric Dark Matter Model

Speaker

Daniel Ruiz Mejía

15:30