Session Program

9-12 Sept 2025









3rd General Meeting of COST Action COSMIC WISPers (CA21106)

WG3 (Astrophysics)

Sofia, Bulgaria, Sofia University Main Building Sofia Center, Tsar Osvoboditel Blvd 15, 1504 Sofia, Bulgaria

Wednesday 10 September

09:30 WG3 (Astrophysics) Location: Sofia, Bulgaria, Sofia University Main Building, Sofia Center, Tsar Osvoboditel Blvd 15, 1504 Sofia, Bulgaria 09:30-10:10 X-ray observations and their applications to the physics of axions (or other WISPs) Speaker Jaime Ruz 10:10-10:50 Axion superradiance **Speaker** Francesca Chadha-Day 10:50 15:30 WG3 (Astrophysics) Session Location: Sofia, Bulgaria, Sofia University Main Building, Sofia Center, Tsar Osvoboditel Blvd 15, 1504 Sofia, Bulgaria 15:30-15:50 X-ray Searches for Axions: The M82 and Betelgeuse Case Studies Speaker Francisco Candon 15:50-16:10 Probing axion-like particles with multimessenger observations of neutron star mergers Speaker Francesca Lecce

16:30

17:00

WG3 (Astrophysics)

Session

Speaker Ángel Gil Muyor

Location: Sofia, Bulgaria, Sofia University Main Building, Sofia Center, Tsar Osvoboditel Blvd 15, 1504 Sofia, Bulgaria

16:10-16:30 Axion production and conversion in astrophysical transients

17:00-17:20

Relaxing supernova constraints: how nucleophobic axions survive finite-density corrections.

Speaker

Vincenzo Fiorentino

17:20-17:40

Sensitivity of CTAO to axion-like particles from blazars: a machine learning approach

Speaker

Francesco Schiavone

17:40-18:00

Probing axion-like particles with very-high-energy gamma rays: Insights from MAGIC and LST-1

Speaker

Ivana Batkovic

18:00-18:20

Probing Ultralight Scalars through Compact Stars and Precision Tests of Gravity

Speaker

Tanmoy Poddar

18:20