

Session Program

7-11 Apr 2025

**31st Young Scientists' Conference on
Astronomy and Space Physics**

High energy astrophysics & cosmology

Zoom

Tuesday 8 April

10:00

High energy astrophysics & cosmology

Session | Location: Zoom

10:00-10:45

Ultra-high-energy neutrinos and their potential origin

Speaker

Arjen van Vliet

10:45-11:00

A dusty nova in the LMC: unraveling its evolution through light curve and spectra

Speaker

Mohit Singh Bisht

11:00-11:15

Unveiling the origin of radio emission in TeV candidate sources with VLBI

Speaker

Janka Kőmíves

11:15-11:30

Radio observations of the magnetar XTE J1810-197 with 32-m Toruń radio telescope

Speaker

Marta Cholewa

11:30-11:45

Search for cosmic ray PeVatrons: gamma-ray emission from the magnetar SGR1900+14, SNR G42.8+0.6, SFR W49A region

Speaker

Anastasiia Sokareva

11:45-12:00

Thermal properties and cosmic ray constraints for gamma-ray production in the Shapley Supercluster

Speaker

Valentyna Babur

12:00-12:15

Implications of photon-axion oscillations on X-ray observations of the Coma cluster

Speaker

Yevhen Sahay

12:15-12:20

Exploring blazar X-ray variability: NICER spectral insights and analysis

Speaker

Sangeetha Kizhakkekalam

12:20-12:25

Accretion dynamics and emission variability in GRS 1915+105: a spectral perspective**Speaker**

Shahzada Akhter

12:25-12:55

Coffee break

12:55-13:40

The skeleton of our Universe**Speaker**

Cora Uhlemann

13:40-13:55

Gravitational force of a torus with an elliptical cross-section in outer region**Speaker**

Serhii Skolota

13:55-14:10

Bayesian constraints on the quasi-rip fate of the Universe: analyzing cosmic acceleration with observational data**Speaker**

Sonali Borah

14:10-14:25

Modified theory of gravity: $f(R)$ theory**Speaker**

Bohdan Hovorukha

14:30