

## **Session Program**

**24-28 Oct 2022**



## **28th Young Scientists' Conference on Astronomy and Space Physics**

***Extragalactic astrophysics and cosmology***

# Monday 24 October

11:00

## Extragalactic astrophysics and cosmology

**Session** | **Conveners:** Ms Iryna Chemerynska, Dr Olena Shubina

11:00–11:45

### In a quest to understand cosmic acceleration: testing gravity and beyond

**Speaker**

Prof. Wojciech Hellwing

11:45–12:00

### Universality of halo mass function in modified gravity cosmologies

**Speaker**

Ms Suhani Gupta

12:00–12:15

### Reconstruction and analysis of cosmological scalar field $\phi$ CDM models

**Speaker**

Dr Olga Avsajanishvili

12:15–12:30

### Predicting large scale structure of the Universe using deep learning methods

**Speaker**

Mr Olexandr Gugin

12:30–12:45

### New approximate expressions for the outer gravitational potential of a torus with an elliptical cross-section

**Speaker**

Mr Sergey Skolota

12:45–13:00

### The choice of the Zone of Avoidance compensation method to estimate clustering dipole in galaxy catalogs

**Speaker**

Ms Magdalena Krupa

13:00–13:05

### Early star-forming galaxies through Gravitational telescopes

**Speaker**

Ms Iryna Chemerynska

13:05–13:10

### Discovering the Radio Cosmos

**Speaker**

Mr Manas Awasthi

13:10–13:40

### Coffee-break

13:40–13:55

### Low frequency radio continuum imaging and SED modeling of 11 local luminous infrared galaxies in radio and infrared domains

**Speaker**

Ms Subhrata Dey

13:55–14:10 **THE CMB Lensing Signal of Cosmic Voids****Speaker**

Mr Umut Demirbozan

14:10–14:25

**Tomography-based observational determination of the abundance of dark matter halos using the submillimeter galaxy magnification bias****Speaker**

Mr Marcos Muñoz Cueli

14:25–14:40 **Galaxy properties as tracers of environment in the cosmic web****Speaker**

Mr Unnikrishnan Sureshkumar

14:40–14:55

**Improved technique for quasar continuum prediction in the Ly $\alpha$  forest based on composite spectra****Speaker**

Dr Olena Torbaniuk

14:55–15:10

**Preliminary Global 21cm Observations with MIST from the Canadian High Arctic****Speaker**

Mr Ian Hendricksen

15:10–15:25 **Dynamic model of the ionosphere for wide-field radio experiments****Speaker**

Mr Vadym Bidula

15:25–15:40

**Drone-Based Calibration Technique for The Array of Long Baseline Antennas for Taking Radio Observations from the Sub-Antarctic (ALBATROS)****Speaker**

Mr Christopher Barbarie

15:40–15:55 **Mapping Dark Matter with Weak Gravitational Lensing Techniques****Speaker**

Ms Mila Arasu

15:55–16:00

**Predicting the redshift of gamma-ray loud AGNs using supervised machine learning****Speaker**

Mr Aditya Narendra

16:00