31st Young Scientists' Conference on Astronomy and Space Physics

Report of Contributions

Contribution ID: 9 Type: **not specified**

Picoflares observed in the EUV solar corona by the Solar Orbiter

Monday 7 April 2025 10:00 (45 minutes)

Presenter: PODLADCHIKOVA, Olena

Session Classification: Solar physics and heliosphere

Contribution ID: 10 Type: not specified

How do eruptive events affect distant prominences? Insights from numerical simulations

Monday 7 April 2025 10:45 (15 minutes)

Presenter: LIAKH, Valeriia

Session Classification: Solar physics and heliosphere

April 16, 2025

Contribution ID: 11 Type: not specified

Automatic detection of Ellerman bombs in the $H\alpha$ line

Monday 7 April 2025 11:00 (15 minutes)

Presenter: FARYAD, Arooj

Session Classification: Solar physics and heliosphere

Contribution ID: 12 Type: not specified

Ensuring data consistency in Solar magnetism studies: a focus on SOHO/MDI and SDO/HMI sunspot data

Monday 7 April 2025 11:15 (15 minutes)

Presenter: GÓRA, Barbara

Session Classification: Solar physics and heliosphere

Contribution ID: 13 Type: not specified

Clustering of wind data at 1 AU to contextualize magnetic reconnection within the solar wind

Monday 7 April 2025 11:30 (15 minutes)

Presenter: CARELLA, Francesco

Session Classification: Solar physics and heliosphere

Contribution ID: 14 Type: not specified

Reconstruction of total solar irradiance variability for the Telescopic Era

Monday 7 April 2025 11:45 (15 minutes)

Presenter: TEMAJ, Duresa

Session Classification: Solar physics and heliosphere

Contribution ID: 15 Type: not specified

Using modern data to understand historical solar observations

Monday 7 April 2025 12:00 (15 minutes)

Presenter: KUMAR YADAV, Ajay

Session Classification: Solar physics and heliosphere

Contribution ID: 16 Type: not specified

Peculiarities of the height and surface inhomogeneity of the magnetic field in the solar flare of November 5, 2004, observed in the Hα and Fe I 6569Å lines

Monday 7 April 2025 12:15 (5 minutes)

Presenter: PAVLICHENKO, Uliana

Session Classification: Solar physics and heliosphere

Contribution ID: 17 Type: not specified

Statistical analysis of aerosol outbreak events in Kyiv, Eastern Europe

Monday 7 April 2025 13:00 (15 minutes)

Presenter: GAO, Xuhui

Session Classification: Atmospheric studies and space geophysics

April 16, 2025

Contribution ID: 18 Type: not specified

Impacts of smoke aerosol on air quality in Northeast China by GEOS-Chem Modeling

Monday 7 April 2025 13:15 (15 minutes)

Presenter: SHI, Yu

Session Classification: Atmospheric studies and space geophysics

Contribution ID: 19 Type: not specified

Dust storms impact on air quality in Jilin Province

Monday 7 April 2025 13:30 (15 minutes)

Presenter: WEI, Xuanyi

Session Classification: Atmospheric studies and space geophysics

Contribution ID: 20 Type: not specified

Design of microwave radiometers for ozone and carbon monoxide study in the atmosphere

Monday 7 April 2025 13:45 (15 minutes)

Presenter: SUN, Xiaopeng

Session Classification: Atmospheric studies and space geophysics

Contribution ID: 21 Type: not specified

Asymmetry of ozone behavior in Eastern and Western Hemispheres over Antarctica in response to sudden stratospheric warming

Monday 7 April 2025 14:00 (15 minutes)

Presenter: YU, Ruixian

Session Classification: Atmospheric studies and space geophysics

Contribution ID: 22 Type: not specified

Ground-based microwave radiometer data processing software and application for stratospheric and mesospheric altitude profile and wind retrievals

Monday 7 April 2025 14:15 (15 minutes)

Presenter: WANG, Lidong

Session Classification: Atmospheric studies and space geophysics

Contribution ID: 23 Type: not specified

Accelerating atmospheric modeling: neural network enhancements for faster NRLMSISE calculations

Monday 7 April 2025 14:30 (15 minutes)

Presenter: KASHYN, Volodymyr

Session Classification: Atmospheric studies and space geophysics

Contribution ID: 24 Type: not specified

Magnetospheric studies: machine learning applications

Monday 7 April 2025 14:45 (15 minutes)

Presenter: PETRENKO, Bohdan

Session Classification: Atmospheric studies and space geophysics

Contribution ID: 25 Type: not specified

Analysis of the impact of external factors on the Perseid meteor shower and forecast of its activity in the coming years

Presenter: SHCHEKINA, Alisa

Session Classification: Atmospheric studies and space geophysics

Contribution ID: 26 Type: not specified

Development of software for studying the accuracy of TLE ephemerides through direct comparison of satellite positions based on optical observations

Presenter: KHMELEVSKA, Yuliia

Session Classification: Atmospheric studies and space geophysics

Contribution ID: 27 Type: not specified

Ultra-high-energy neutrinos and their potential origin

Tuesday 8 April 2025 10:00 (45 minutes)

Presenter: VAN VLIET, Arjen

Session Classification: High energy astrophysics & cosmology

Contribution ID: 28 Type: not specified

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

Tuesday 8 April 2025 10:45 (15 minutes)

Presenter: SINGH BISHT, Mohit

Session Classification: High energy astrophysics & cosmology

Contribution ID: 29 Type: not specified

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

Tuesday 8 April 2025 11:00 (15 minutes)

Presenter: KŐMÍVES, Janka

Session Classification: High energy astrophysics & cosmology

Contribution ID: 30 Type: not specified

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

Tuesday 8 April 2025 11:15 (15 minutes)

Presenter: CHOLEWA, Marta

Session Classification: High energy astrophysics & cosmology

Contribution ID: 31 Type: not specified

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

Tuesday 8 April 2025 11:30 (15 minutes)

Presenter: SOKAREVA, Anastasiia

Session Classification: High energy astrophysics & cosmology

Contribution ID: 32 Type: not specified

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

Tuesday 8 April 2025 11:45 (15 minutes)

Presenter: BABUR, Valentyna

Session Classification: High energy astrophysics & cosmology

Contribution ID: 33 Type: not specified

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

Tuesday 8 April 2025 12:00 (15 minutes)

Presenter: SAHAY, Yevhen

Session Classification: High energy astrophysics & cosmology

Contribution ID: 34 Type: not specified

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

Tuesday 8 April 2025 12:15 (5 minutes)

Presenter: KIZHAKKEKALAM, Sangeetha

Session Classification: High energy astrophysics & cosmology

Contribution ID: 35 Type: not specified

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

Tuesday 8 April 2025 12:20 (5 minutes)

Presenter: AKHTER, Shahzada

Session Classification: High energy astrophysics & cosmology

Contribution ID: 36 Type: not specified

The skeleton of our Universe

Tuesday 8 April 2025 12:55 (45 minutes)

Presenter: UHLEMANN, Cora

Session Classification: High energy astrophysics & cosmology

Contribution ID: 37 Type: not specified

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

Tuesday 8 April 2025 13:40 (15 minutes)

Presenter: SKOLOTA, Serhii

Session Classification: High energy astrophysics & cosmology

Contribution ID: 38 Type: not specified

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

Tuesday 8 April 2025 13:55 (15 minutes)

Presenter: BORAH, Sonali

Session Classification: High energy astrophysics & cosmology

Contribution ID: 39 Type: not specified

Modified theory of gravity: f(R) theory

Tuesday 8 April 2025 14:10 (15 minutes)

Presenter: HOVORUKHA, Bohdan

Session Classification: High energy astrophysics & cosmology

Contribution ID: 41 Type: not specified

Universe Space Tech —astronomy and space tech for everyone

Wednesday 9 April 2025 11:00 (20 minutes)

Presenter: BURLAKA, Oleksandr

Session Classification: Ukrainian astronomy-related projects

Contribution ID: 42 Type: not specified

How participation in a Hackathon can help you find an idea, make friends, or even start your own business

Wednesday 9 April 2025 11:20 (20 minutes)

Presenter: MALKEVYCH, Roman

Session Classification: Ukrainian astronomy-related projects

Contribution ID: 43 Type: not specified

AstroSandbox. First open-access Ukrainian advanced astronomy educational project

Wednesday 9 April 2025 11:40 (20 minutes)

Presenter: KARASOVA, Taisiia

Session Classification: Ukrainian astronomy-related projects

Contribution ID: 44 Type: **not specified**

Studying comets by means of the ground-based observations

Wednesday 9 April 2025 12:00 (45 minutes)

Presenter: ZUBKO, Evgenij

Session Classification: Solar System and extrasolar planets

Contribution ID: 45 Type: not specified

Dynamics of the impact of small celestial bodies on Jupiter

Wednesday 9 April 2025 12:45 (15 minutes)

Presenter: ASGAROVA, Banovsha

Session Classification: Solar System and extrasolar planets

Contribution ID: 46 Type: not specified

Space weathering: observational manifestations and their physical causes

Wednesday 9 April 2025 13:00 (15 minutes)

Presenter: PANASIUK, Andrii

Session Classification: Solar System and extrasolar planets

Contribution ID: 47 Type: **not specified**

Modeling the dynamics of a binary asteroid and scenarios of its evolution

Wednesday 9 April 2025 13:15 (15 minutes)

Presenter: ALEKSANDROV, Artur

Session Classification: Solar System and extrasolar planets

Contribution ID: 48 Type: not specified

Various aspects of the 1D asteroid model

Wednesday 9 April 2025 13:30 (15 minutes)

Presenter: KASIANCHUK, Arsenii

Session Classification: Solar System and extrasolar planets

Contribution ID: 49 Type: not specified

Pre-perihelion activity of dynamically new comet C/2017 K2 (PANSTARRS)

Wednesday 9 April 2025 13:45 (15 minutes)

Presenter: KASIANCHUK, Arsenii

Session Classification: Solar System and extrasolar planets

Contribution ID: **50** Type: **not specified**

Coma morphology of selected comets based on observations at the Kyiv Comet Station (MPC 585)

Wednesday 9 April 2025 14:30 (15 minutes)

Presenter: KASIANCHUK, Arsenii

Session Classification: Solar System and extrasolar planets

Contribution ID: 51 Type: not specified

Mechanisms and statistics of cometary dust color changes

Wednesday 9 April 2025 14:45 (15 minutes)

Presenter: VOITKO, Anhelina

Session Classification: Solar System and extrasolar planets

Contribution ID: 52 Type: not specified

Dynamics of particles in protoplanetary disks

Wednesday 9 April 2025 15:00 (15 minutes)

Presenter: FANDIEIEV, Vlada

Session Classification: Solar System and extrasolar planets

Contribution ID: 53 Type: not specified

Identification of exoplanetary transit signals in TESS Sector 85: detection of potential candidates via false positive analysis

Wednesday 9 April 2025 15:15 (15 minutes)

Presenter: YATSIUK, Maria

Session Classification: Solar System and extrasolar planets

Contribution ID: 54 Type: not specified

Detection of organic materials on the surface and in the atmospheres of exoplanets

Wednesday 9 April 2025 15:30 (15 minutes)

Presenter: LOBODENKO, Mariia

Session Classification: Solar System and extrasolar planets

Contribution ID: 55 Type: not specified

Atmospheric structure and meteorology of SIMP-0136 with NIRISS spectra

Wednesday 9 April 2025 15:45 (15 minutes)

Presenter: AKHMETSHYN, Roman

Session Classification: Solar System and extrasolar planets

Contribution ID: 56 Type: not specified

Constraining mass, orbital period, and eccentricity of non-transiting exoplanets using machine learning and MCMC-driven N-body simulations

Wednesday 9 April 2025 16:00 (15 minutes)

Constraining mass, orbital period, · · ·

Presenter: NATH, Arushi

Session Classification: Solar System and extrasolar planets

Contribution ID: 57 Type: not specified

Searching for signals of transiting planets in the TESS light curves of white dwarfs with dust disks

Wednesday 9 April 2025 16:15 (5 minutes)

Presenter: SAKER, Leila

Session Classification: Solar System and extrasolar planets

Contribution ID: 58 Type: not specified

The TESS/MAROON-X survey for transiting planets around thick-disk stars: first results

Wednesday 9 April 2025 16:20 (5 minutes)

Presenter: JOFRÉ, Emiliano

Session Classification: Solar System and extrasolar planets

Contribution ID: 59 Type: not specified

Understanding AGN through variability: pleasures and pains

Thursday 10 April 2025 10:00 (45 minutes)

Presenter: PAOLILLO, Maurizio

Session Classification: Extragalactic astrophysics

Contribution ID: 60 Type: not specified

NGC3521 as the Milky Way analogue: spectral energy distribution from UV to Radio

Thursday 10 April 2025 10:45 (15 minutes)

Presenter: PASTOVEN, Olena

Session Classification: Extragalactic astrophysics

Contribution ID: 61 Type: not specified

Unravelling the morphology and kinematics of young stars in the Small Magellanic Cloud

Thursday 10 April 2025 11:00 (15 minutes)

Presenter: HOTA, Sipra

Session Classification: Extragalactic astrophysics

Contribution ID: 62 Type: not specified

Star formation rate surface density since z=12 in semi-analytic model

Thursday 10 April 2025 11:15 (15 minutes)

Presenter: NADOLNY, Jakub

Session Classification: Extragalactic astrophysics

Contribution ID: 63 Type: not specified

JWST's GLIMPSE into faint galaxies at Cosmic Dawn

Thursday 10 April 2025 11:30 (15 minutes)

Presenter: CHEMERYNSKA, Iryna

Session Classification: Extragalactic astrophysics

Contribution ID: 65 Type: not specified

DAIQUIRI: Dual AGN Intelligent Query. Spectroscopic preselection

Thursday 10 April 2025 11:45 (15 minutes)

Presenter: RYZHOV, Oleh

Session Classification: Extragalactic astrophysics

Contribution ID: 66 Type: not specified

Short-term optical variability in TESS blazars: QPO detections and preliminary time-domain results

Thursday 10 April 2025 12:00 (15 minutes)

Presenter: DZYGUNENKO, Andrii

Session Classification: Extragalactic astrophysics

Contribution ID: 67 Type: not specified

Two quasars in the early Universe at milliarcsecond-scale resolution

Thursday 10 April 2025 12:45 (15 minutes)

Presenter: HUSVÉTH, Bence

Session Classification: Extragalactic astrophysics

Contribution ID: 68 Type: not specified

High-resolution radio imaging of the distant blazar J1429+5406

Thursday 10 April 2025 13:00 (15 minutes)

Presenter: KOLLER, Dávid

Session Classification: Extragalactic astrophysics

Contribution ID: 69 Type: not specified

Unveiling the broadband spectral and temporal properties of VHE blazar 1ES 1959+650 using multiwavelength observations

Thursday 10 April 2025 14:25 (5 minutes)

Presenter: UN NISA RAFEEQI, Peer Anjum

Session Classification: Extragalactic astrophysics

Contribution ID: 71 Type: not specified

Exploring the host galaxies' central concentration level of a new population of IR-selected tidal disruption events

Thursday 10 April 2025 13:15 (15 minutes)

Presenter: KARASOVA, Taisiia

Session Classification: Extragalactic astrophysics

Contribution ID: 72 Type: not specified

Modelling the light curve of tidal disruption events with TiDE

Thursday 10 April 2025 13:30 (15 minutes)

Presenter: KOVÁCS-STERMECZKY, Zsófia

Session Classification: Extragalactic astrophysics

Contribution ID: 73 Type: not specified

Investigation of super-Eddington discs around tidal disruption events

Thursday 10 April 2025 13:45 (15 minutes)

Presenter: SZABÓ, Domonkos

Session Classification: Extragalactic astrophysics

Contribution ID: 74 Type: **not specified**

N-body simulations of mergers based on giant radio galaxy NGC1316

Thursday 10 April 2025 14:00 (15 minutes)

Presenter: GERVILLE-REACHE, Elko

Session Classification: Extragalactic astrophysics

Contribution ID: 75 Type: **not specified**

Modeling excess surface density to determine cluster subhalo masses and confirm tidal stripping of dark matter

Thursday 10 April 2025 14:15 (5 minutes)

Presenter: AKHMETSHYN, Roman

Session Classification: Extragalactic astrophysics

Contribution ID: 77 Type: **not specified**

Is the quasar J1438+6211 a compact symmetric object?

Thursday 10 April 2025 14:20 (5 minutes)

Presenter: OLTVÁRI, Zsófia

Session Classification: Extragalactic astrophysics

Contribution ID: 78 Type: not specified

Exploring the plunging black hole region: first detections and implications

Thursday 10 April 2025 14:30 (5 minutes)

Presenter: SHAH, Manasvi

Session Classification: Extragalactic astrophysics

Contribution ID: 79 Type: not specified

Stellar variability on the upper main sequence

Friday 11 April 2025 10:00 (45 minutes)

Stellar variability on the upper m $\,\cdots\,$

Presenter: SKARKA, Marek

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 80 Type: not specified

The last pulses of a dying variable star, observing the thermal pulse of RU Vulpeculae

Friday 11 April 2025 10:45 (15 minutes)

Presenter: ZOLTÁN KERTÉSZ, Balázs

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 81 Type: not specified

Superhumps in active dwarf nova ER UMa

Friday 11 April 2025 11:00 (15 minutes)

Presenter: KIRPLUK, Bartosz

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 82 Type: not specified

Variable star β Lyra: photometry and mass transfer in system

Friday 11 April 2025 11:15 (15 minutes)

Presenter: VIAZOVSKA, Solomia

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 83 Type: not specified

Understanding the spectrometric variability of ζ Ori A

Friday 11 April 2025 11:30 (15 minutes)

Presenter: POKHVALA, Serhii

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 84 Type: not specified

Long-term monitoring of EK Draconis

Friday 11 April 2025 11:45 (15 minutes)

Presenter: GÖRGEI, Anna

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: **86** Type: **not specified**

Modern approach of turbulent convection in classical variables

Friday 11 April 2025 12:30 (15 minutes)

Presenter: KOVÁCS, Gábor

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 87 Type: not specified

Optical follow-up study of the 2021 hot-type outburst in YY Herculis

Friday 11 April 2025 12:45 (15 minutes)

Presenter: SONITH, L. S.

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 88 Type: not specified

Detection and analysis of stellar flares using high-cadence photometry

Friday 11 April 2025 13:00 (15 minutes)

Presenter: SCHMERCZ, Blanka

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 89 Type: not specified

Investigation of young binary systems using LAMOST and our own spectrograph

Friday 11 April 2025 13:15 (15 minutes)

Presenter: STOCK, Lukas

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 91 Type: not specified

Photometric analysis and modelling in PHOEBE of the GZ Draconis

Friday 11 April 2025 13:30 (5 minutes)

Presenter: OLTVÁRI, Zsófia

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 92 Type: not specified

Investigating the blue straggler stars in Trumpler 19: a multi-wavelength SED and photometric analysis

Friday 11 April 2025 13:35 (5 minutes)

Presenter: CENNET ÇINAR, Deniz

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 93 Type: not specified

Exploring the effects of flares on potentially habitable planets around ultra-cool dwarfs with TESS

Friday 11 April 2025 13:40 (5 minutes)

Presenter: PETRUCCI, Romina

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 95 Type: not specified

Modelling the radiation of shockwave-heated circumstellar material around SN 2019vxm

Friday 11 April 2025 14:30 (15 minutes)

Presenter: LELKES, Klára

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 96 Type: not specified

Turbulence of molecular cloud environments of core-collapse supernovae

Friday 11 April 2025 14:45 (15 minutes)

Presenter: SOLAR, Martín

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 97 Type: not specified

Filaments and dense cores in Aquila molecular cloud

Friday 11 April 2025 15:00 (15 minutes)

Presenter: MOHARANA, Satyajeet

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 98 Type: not specified

Magnetic fields on different spatial scales of the L328 cloud

Friday 11 April 2025 15:15 (15 minutes)

Presenter: GUPTA, Shivani

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 99 Type: not specified

Photometric study of young open cluster NGC2345

Friday 11 April 2025 15:30 (15 minutes)

Presenter: BELWAL, Kuldeep

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 100 Type: not specified

Machine learning-based astrometric and photometric analysis of the binary open clusters NGC884 and NGC869

Friday 11 April 2025 15:45 (15 minutes)

Presenter: TAŞDEMIR, Seval

Session Classification: Stellar Astrophysics and Interstellar Medium

Contribution ID: 103 Type: not specified

Estimating SED-based effective temperatures of member stars in CI Roslund 6

Friday 11 April 2025 16:15 (5 minutes)

Presenter: ASYA SEZGIN, Elara

Session Classification: Stellar Astrophysics and Interstellar Medium

Coffee break

Contribution ID: 129 Type: not specified

Coffee break

Session Classification: Extragalactic astrophysics

Contribution ID: 130 Type: not specified

Spectroscopic and photometric characterization of evolved stars hosting brown dwarfs with Gemini-GRACES and TESS

Friday 11 April 2025 13:45 (5 minutes)

Presenter: ZULOAGA, Camila

Session Classification: Stellar Astrophysics and Interstellar Medium

Official closure

Contribution ID: 131 Type: not specified

Official closure

Friday 11 April 2025 16:20 (30 minutes)

Official opening

Contribution ID: 132 Type: not specified

Official opening

Monday 7 April 2025 09:30 (30 minutes)

Contribution ID: 133 Type: not specified

Understanding the ionized and neutral gas dynamics in planetary nebula NGC 6445

Friday 11 April 2025 16:00 (15 minutes)

Presenter: KHUSHBU, K.

Session Classification: Stellar Astrophysics and Interstellar Medium