

**XXIV GAMOW INTERNATIONAL ASTRONOMICAL CONFERENCE:
"ASTRONOMY AND BEYOND: ASTROPHYSICS, COSMOLOGY AND
GRAVITATION, ASTROPARTICLE PHYSICS, RADIO ASTRONOMY,
ASTROBIOLOGY AND GENETICS"**

AUGUST 19 - 23, 2024 ODESA, UKRAINE

Preliminary Program

(The program indicates the time in Ukraine, that is the Central European Time +1)

Monday, 19.08.2023

09:30 – 10:00 OPENING OF THE CONFERENCE AND GREETING TALKS

(Convener O.M.Ulyanov)

Greetings of the Rector of the Odessa I.I.Mechnikov National University *V.I.Truba*

Greetings of the President of the Ukrainian Astronomical Association *Ya.S.Yatskiv*

10:00 – 12:30 MEMORIAL SESSION

1.10.00-10.30 Massimo Capaccioli, Università di Napoli Federico II, Italy.

A Fil Rouge of Genius: from Galilei to Gamow.

2. 10.30-11.10 Alessandro Bettini, University of Padua, Department of Physics and Astronomy “Galileo Galilei”, Italy.

Four-hundred years of Relativity Principle.

3. 11.10-11.30 O.A. Bazyey, ONU, Odesa, Ukraine.

Kant and Laplace - in search of the root cause

(to the 300th anniversary of the birth of I. Kant and the 275th anniversary of the birth of P. Laplace).

4 11.30-11.50 M.I. Ryabov, IRA NANU, Ukraine.

Gamow conference in Washington University and 30-th anniversary Gamow’s Conference in Odesa University.

5. 11.50-12.10 I.L. Andronov, ONMU, Odesa, Ukraine.**A.M.Shulberg**

(27.05.1914-01.09.1994) and the modeling of eclipsing binary systems with spherical components

6. 12.10-12.30 Memorial Prof. V.G. Karetnikov

14:00 – 18:00 PLENARY SESSION (35 +5 minutes for the report and questions)

(Convener A.I.Zhuk)

1. 14.00-14.40 S. Parnovsky, Taras Shevchenko National University of Kyiv, Observatory, Ukraine. **The Einstein-Podolsky-Rosen paper: history and false instantaneous information transfer paradox.**

2. 14.40-15.20 **R. Ragazzoni**, President of the Italian National Institute for Astrophysics (INAF), Italy. **How large a telescope can be?**
3. 15.20-16.00 **Ö. Akarsu**, Department of Physics, Istanbul Technical University, Turkey. **Λ CDM Cosmology: A Promising Paradigm Free of Cosmological Tensions.**
4. 16.00-16.40 **E. Bannikova**, INAF - Astronomical Observatory of Capodimonte, Naples, Italy; IRA NASU, Kharkiv, Ukraine. **Galactic Nuclei: evolution of theory and observations.**
5. 16.40 – 17.20 **I. Usoskin**, Oulu University, Finland. **TBA.**
6. 17.20-18.00 **A. Linde**, Stanford Institute for Theoretical Physics and Department of Physics, Stanford University, USA. **Present status of inflationary cosmology.**

Tuesday, 20.08.2023

- 10:00 – 12:40 PLENARY SESSION** (35 +5 minutes for the report and questions)
(*Convener I.Andronov*)
7. 10.00-10.40 **R. Ruffini**, Director of ICRA Net, Italy. **TBA.**
8. 10.40-11.20 **N. Gopalswamy**, NASA Goddard Space Flight Center, USA. **TBA.**
9. 11.20-12.00 **V. Zakharenko, O. Konovalenko** (IRA NASU, Kharkiv, Ukraine), et al. **On the possibility of detecting a signal in the 21 cm hydrogen line from the Dark Ages at a decameter wavelength.**
10. 12.00-12.40 **B. Novosyadly**, Astronomical Observatory of Lviv University, Ukraine. **Signal in the redshifted hydrogen 21 cm line from Dark Ages and Cosmic Dawn as a new cosmological test.**
- 12:40 – 14:00 Lunch**
- 14:00 – 16:00 PLENARY SESSION** (30 +5 minutes for the report and questions)
(*Convener B. Novosyadlyi.*)
11. 14.00-14.40 **V. Zhdanov, O. Stashko, Yu. Shtanov**, Taras Shevchenko Nat. Univ. of Kyiv, Ukraine; Princeton University, USA; Bogolyubov Inst. for Theor. Phys., Kyiv, Ukraine. **Cosmic censorship and naked singularities in the quadratic $f(R)$ gravity.**

12. 14.40-15.20 **I. Andronov et al**, Odesa National Maritime University, Odesa, Ukraine. **Variable stars: Clues from the multi-component variability.**

16:00 – 16:30 CLOSING OF THE PLENARY SESSION.

SECTION SESSIONS

August, 21 – 23

SECTIONS:

**Cosmology, gravitation, astroparticle physics, high energy physics
(Chair *A.I. Zhuk*); August 21 (Wednesday) (10.00 – 13.00, 14.00 – 18.00)**

**2. Astrophysics: nucleosynthesis, stellar atmospheres, kinematics, structure
and chemical evolution of the Galaxy (Chair *T.V. Mishenina*);
August 21 (Wednesday) (10.00 – 13.00, 14.00 – 18.00)**

**3. Astrophysics: Interacting Binary Systems and Variable Stars
(Chair *I.L. Andronov*);
August 22 (Thursday) (10.00 – 13.00, 14.00 – 18.00)**

**4. Astrophysics: Extragalactic astronomy and Astroinformatics
(Chair *I.B. Vavilova*);
August 22 (Thursday) (10.00 – 13.00, 14.00 – 18.00)**

**5. Solar System, Exoplanets and Near-Earth astronomy (Chair *N.I. Koshkin*);
August 22 (Thursday) (10.00 – 13.00, 14.00 – 18.00)**

**6. Radio astronomy (Chairs *O.M. Ulyanov, O.A. Litvinenko*);
August 23 (Friday) (10.00 – 13.00)**

**7. Sun, solar activity, solar-terrestrial relations and astrobiology
(Chairs *V.M. Efimenko, M.I. Ryabov*);
August 23 (Friday) (14.00 – 18.00)**

**8. Biologic section «Gamow's ideas in 21st century biology»
(Chair *S.V. Chebotar*);
August 16 (Friday) (10.00 – 13.00, 14.00 – 18.00)**

**9. Astronomical education, Astronomy Outreach and Planetariums in
Ukraine:**

**Subsection «Astronomical Education and Astronomy Outreach»
(Chair *I.L. Andronov*);
August 21 (Wednesday) (14.00 – 18.00)**

**Subsection «Planetariums in Ukraine» (Chairs *G.V. Zheleznyak*,
M.I. Ryabov).
August 22 (Thursday) (14.00 – 18.00)**

Program and abstracts will be posted on the web page of the Conference:
www.gamow.odessa.ua

In case of problems with uploading abstract texts, please send them to
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