

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



Organizers: Odesa I.I. Mechnikov National University (ONU), Institute of Radio Astronomy of the National Academy of Sciences of Ukraine (IRA NASU), Ukrainian Astronomical Association (UAA), Odesa National Maritime University (ONMU), Odesa Astronomical Society.

SCIENTIFIC ORGANIZING COMMITTEE:

Chairs of SOC: A.I. Zhuk (ONU, Odesa; CASUS, Görlitz, Germany)

Vice-chair: M.I. Ryabov (IRA NASU, Odesa, ryabov-uran@ukr.net)

Secretary: S.M. Melikiants (ONU, Odesa, sedamelikk@gmail.com)

Members of SOC: I.L. Andronov (ONMU, Odesa), M. Capaccioli (Naples University, Italy), S.V. Chebotar (ONU, Odesa), L.L. Jenkovszky (ITP, Kyiv), K. Georgieva (SRTI, Sofia, Bulgaria), N.I. Koshkin (ONU, Odesa), I. Kudzej (Vihorlat observatory in Humenné, Slovakia), T.V. Mishenina (ONU, Odesa), A.S. Miroshnichenko (University of North Carolina, USA), I. Shmeld (VIRAC, Latvia), O.M. Ulyanov (IRA NASU, Kharkiv), I.B. Vavilova (MAO NASU, Kyiv), Y.S. Yatskiv (MAO NASU, Kyiv), V.V. Zakharenko (IRA NASU, Kharkiv), M.Zejda (MUNI, Slovakia), S. Zola (AO UJ, Poland).

LOCAL ORGANIZING COMMITTEE

Chair of LOC: V.I. Truba (Rector of ONU)

Vice-chair of LOC: M.I. Ryabov

**Members of LOC: V.O. Borshchenko, V.V. Breus, L.L.Chinarova,
N.I. Koshkin, L.S. Kudashkina, S.M. Melikiants, S.L. Strakhova, A.L. Sukharev,
V.O. Yushchenko, D.A. Zabora**

The 2024 conference is dedicated to the 120th anniversary of the birth of the outstanding scientist George Gamow. Gamow was one of the active participants in the revolution in physics and astrophysics of the 20th century, and his name holds honor among such great minds as A. Einstein, N. Bohr, E. Rutherford, M. Planck, and others. Today, the popularity of George Gamow is attributed not only to the breadth of his scientific interests but also to his unique "Gamow style" in solving scientific problems.

The conference will highlight contemporary trends in the development of cosmology and astrophysics, especially in areas where George Gamow actively contributed. The event will also show case unique materials from the life and work of George Gamow, including documents related to the scientific conferences he organized at the University of Washington from 1935 to 1942.

In 2024, it marks 30 years since the commencement of the Gamow Conferences in Odesa – the city where George Gamow was born and raised, and where he chose his scientific career. The Odesa conferences continue the traditions laid by George Gamow at the University of Washington. Since 2000, the Gamow Conferences have been held annually in Odesa. The Odesa National University named after I.I.Mechnikov instituted the commemorative Gamow Medal, awarded to distinguished scientists participating in the Gamow Conferences. Since 2022, the National Academy of Sciences of Ukraine has established the Gamow Prize in the field of cosmology and astrophysics. In Odesa, one of the squares is named after Georgy Gamow, and a memorial plaque on the main building of the university commemorates his time as a student. These achievements are largely due to the Odesa Gamow Conferences, and the Organizing Committee hopes that this tradition will be successfully continued.

Remarkable dates in 2024:

- **the 120-th anniversary of George Gamow**
- **the 460-th anniversary of Galileo Galilei**
- **the 145-th anniversary of Albert Einstein**

Anniversaries of the Odesa Astronomical Observatory:

- **the 110-th anniversary of Alexander Schulberg**

SCIENTIFIC TOPICS:

Cosmology, gravitation, astroparticle physics, high energy physics, extragalactic astronomy, astrophysics, radio astronomy, solar activity and solar-terrestrial relations, Solar system, exoplanets, astrobiology, genetics.

SECTIONS:

- 1. Cosmology, gravitation, astroparticle physics, high energy physics
(Chair *A.I. Zhuk*);**
- 2. Astrophysics: nucleosynthesis, stellar atmospheres, kinematics, structure and chemical evolution of the Galaxy (Chair *T.V. Mishenina*);**
- 3. Astrophysics: Interacting Binary Systems and Variable Stars
(Chair *I.L. Andronov*);**
- 4. Astrophysics: Extragalactic astronomy and Astroinformatics
(Chair *I.B. Vavilova*);**
- 5. Radio astronomy (Chairs *O.M. Ulyanov, O.A. Litvinenko*);**
- 6. Sun, solar activity, solar-terrestrial relations and astrobiology
(Chairs *V.M. Efimenko, M.I. Ryabov*);**
- 7. Solar System, Exoplanets and Near-Earth astronomy (Chair *N.I. Koshkin*);**
- 8. Biologic section «Gamow's ideas in 21st century biology»
(Chair *S.V. Chebotar*);**
- 9. Astronomical education, Astronomy Outreach and Planetariums in
Ukraine:**
**Subsection «Astronomical Education and Astronomy Outreach»
(Chair *I.L. Andronov*);**
**Subsection «Planetariums in Ukraine» (Chairs *G.V. Zheleznyak,*
M.I. Ryabov).**

The Conference Program will be organized in the form of on-line sessions and will include:

- Plenary reports on anniversaries**
- Plenary sessions in the form of 30-40 minute reports**
- Section meetings with 15-20 minute reports**
- The affiliate sections and subsections**
- Discussions**

If necessary, a “poster session” will also be organized for participants in the form of short 5-8 minute oral presentations.

Participants who will be in Odesa at the time of the conference will have the opportunity to take part in off-line sessions at the Astronomical observatory in Shevchenko park.

Registration of participants will be carried out on the conference website:

www.gamow.odessa.ua

Working language of the Gamow International Conference is English.

IMPORTANT CONFERENCE EVENTS

First announcement	02 April
Open registration and abstract	22 April
Second announcement	20 May
Third announcement	1 August
Final registration	1 August (deadline)
Abstract submission	1 August (deadline)
The Conference opening	19 August
The Conference closing	23 August

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