

SECOND ANNOUNCEMENT

XXV Gamow International Astronomical Conference

ASTRONOMY AND BEYOND: ASTROPHYSICS,
COSMOLOGY AND GRAVITATION, ASTROPARTICLE PHYSICS,
RADIO ASTRONOMY, ASTROBIOLOGY AND GENETICS

August 18–22, 2025 — Odesa, Ukraine



Organizers:

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

Conference Dedication

The 2025 conference is dedicated to the 121st anniversary of the birth of the outstanding scientist George Gamow.

Gamow was a prominent figure in the scientific revolution of the 20th century, and his legacy stands alongside such names as Einstein, Bohr, Rutherford, and Planck. His unique “Gamow style” continues to inspire scientists through both his profound ideas and his playful approach to serious problems.

This year also marks the 25th anniversary of the annual Gamow Conferences held in Odesa — the city of Gamow's birth, education, and early scientific steps. These conferences carry forward the traditions initiated by Gamow at the University of Washington (1935–1942).

The Gamow Medal, awarded by ONU, and the Gamow Prize (established by NAS of Ukraine in 2022) are direct outcomes of this tradition. A square in Odesa is named after Gamow, and a commemorative plaque on the university honors his legacy.

Notable Anniversaries in 2025:

- 160th anniversary of Odesa I.I. Mechnikov National University
- 175th anniversary of Prof. A.K. Kononovich (director of the Odesa Observatory, 1881–1911)
- 145th anniversary of Academician A.Ya. Orlov (director of Odesa Observatory in 1912–1934, Poltava Gravimetric Observatory in 1926-1934, 1938-1951 and MAO NASU in 1944-1948, 1950-1951)
- 100th anniversary of Edwin Hubble's announcement of galaxy classification and the expanding universe
- 110th anniversary of Einstein's General Theory of Relativity
- 100th anniversary of the first planetarium
- 35th anniversary of the Hubble Space Telescope

Scientific Organizing Committee:

Co-Chairs:

- A.I. Zhuk (ONU, Ukraine/CASUS, Germany)
- M. Capaccioli (Naples University, Italy)

Vice-Chair:

- M.I. Ryabov (IRA NASU, Ukraine)

Secretary:

- S.M. Melikiants (ONU, Ukraine)

Members:

S.M. Andrievsky (ONU, Ukraine), I.L. Andronov (ONMU, Ukraine), S.V. Chebotar (ONU, Ukraine), I. Eglitis (Institute of Astronomy, Latvia), K. Georgieva (SRTI, Bulgaria), W.Godlowski (Opole University, Poland), N.I. Koshkin (ONU, Ukraine), I. Kudzej (Vihorlat observatory in Humenné, Slovakia), E.F.Milone (Rothney Astrophysical Observatory, University of Calgary, Canada), B.Ya.Melekh (LNU, Ukraine), T.V. Mishenina (ONU, Ukraine), B.S. Novosyadlyj (LNU, Ukraine), E.Paunzen (MUNI, Czechia), I. Shmeld (VIRAC, Latvia), O.M. Ulyanov (IRA NASU, Ukraine), I. Usoskin (Oulu University, Finland), I.B. Vavilova (MAO NASU, Ukraine), Y.S. Yatskiv (MAO NASU, Ukraine), V.V. Zakharenko (IRA NASU, Ukraine), S.Zola (UJ, Poland).

Local Organizing Committee:

Chair:

- V.I. Truba (Rector of ONU)

Vice-chair of LOC:

- M.I. Ryabov (IRA NASU)

Members:

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

Important Conference Events

- First Announcement: May 15
- Opening of Registration and Abstract Submission: May 30
- Second Announcement: July 15
- Third Announcement: August 10
- Final Registration Deadline: August 1
- Abstract Submission Deadline: August 1
- Conference Opening: August 18
- Conference Closing: August 22

Conference Topics:

Cosmology and Gravitation, Astroparticle Physics and High Energy Physics, Astrophysics, Extragalactic astronomy, Radio Astronomy, Solar Activity and Solar-Terrestrial Relations, Solar System, Exoplanets, Astrobiology and Genetics

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

PRELIMINARY PROGRAM

August 18

09.30 – 18.00 Opening of the conference,
Greeting talks, Memorial and Plenary reports

August 19

09.00 – 14.00 Plenary session

August 20

09.00 – 14.00 Plenary session

August 19 -- 22

09.30 – 18.00. Section sessions

Conference Sections:

- 1. Cosmology, gravitation, astroparticle physics, high energy physics (Chair *A.I. Zhuk*); August 19 (14.30 - 18.00)**
- 2. Astrophysics: nucleosynthesis, stellar atmospheres, kinematics, structure and chemical evolution of the Galaxy (Chair *T.V. Mishenina*); August 20 (14.30 - 18.00)**
- 3. Astrophysics: Interacting Binary Systems and Variable Stars (Chair *I.L. Andronov*); August 21 (09.30- 13.00)**
- 4. Extragalactic astronomy and Astroinformatics (Chair *I.B. Vavilova*); August 22 (09.30- 13.00)**
- 5. Solar System, Exoplanets and Near-Earth astronomy (Chair *N.I. Koshkin*); August 19 (14.30- 18.00)**
- 6. Radio astronomy (Chairs *O.M. Ulyanov, O.A. Litvinenko*); August 21 (09.30 – 13.00)**
- 7. Sun, solar activity, solar-terrestrial relations and astrobiology (Chairs *V.M. Efimenko, M.I. Ryabov*); August 22 (09.30 - 13.00)**
- 8. Biologic section: «Gamow's ideas in 21st century biology» (Chair *S.V. Chebotar*); August 19 (10.00 – 13.00, 14.00 - 18.00)**
- 9. Astronomical education, Astronomy Outreach and Planetariums in Ukraine:**
 - 9.1 Subsection «Astronomical Education and Astronomy Outreach» (Chair *I.L. Andronov*); August 21 (14.00- 18.00)**
 - 9.2 Subsection «Popularization of astronomy and Planetariums in Ukraine» (Chairs *G.V. Zheleznyak, M.I. Ryabov*). August 22 (14.00- 18.00)**

SCHEDULE OF THE PLENARY AND SECTION SESSIONS

Data Section	18.08	19.08	20.08	21.08	22.08
Opening of the Conference and Memorial Session	09.30 – 12.30				
Plenary Session	13.00 – 18.00	09.00 – 14.00	09.00 – 14.00		
Section 1. Cosmology, ...		14.30 – 18.00			
Section 2. Astrophysics (Chair T.Mishenina)			14.30 – 18.00		
Section 3 Astrophysics (Chair I.Andronov)				09.30 – 13.00	
Section 4. Extragalactic astronomy and Astroinformatics					9.30 – 13.00
Section 5. Solar System and Space Environment		14.30-18.00			
Section 6. Radioastronomy				09.30 – 13.00	
Section 7. Sun, Solar activity and Astrobiology					09.30 – 13.00
Section 8. Biologic Section		10.00 – 18.00			
Subsection 9.1 Astronomical Education and Outreach				14.00 – 18.00	
Subsection 9.2 Popularization of Astronomy and Planetariums in Ukraine					14.00-18.00

Program and abstracts will be posted on the web page of the Conference:
www.gamow.odessa.ua **Participant registration** is available through the conference website: <https://gamow.odessa.ua/>

Only registered participants will be able to take part in the conference. The working language of the Gamow International Conference is English.

Publications:

Scientific articles based on plenary and section reports are welcome for publication in the journal «Odessa Astronomical Publications» (<http://oap.onu.edu.ua/>). The next issue will be published this year. We also plan to publish reports on radio astronomy in «Radioastronomy and Radiophysics».

Attention!
Publications in OAP

Dear Authors,

To help us streamline the review process, **we kindly ask you to submit your manuscripts for Odessa Astronomical Publications to the editors BEFORE the Gamow Conference**. We believe this will greatly facilitate the timely processing of all submissions. Please also be aware that **manuscripts not formatted according to our detailed author guidelines may regrettably not be considered**. You can find all the necessary rules here:

- http://astro-observ-odessa0.1gb.ua/dat/Oap/oap_word.docx
- http://astro-observ-odessa0.1gb.ua/dat/Oap/oap_tex.tex

Finally, we would like to **emphasize the importance of paying special attention to the quality of the English language** in your manuscript.

We appreciate your effort and cooperation.

Editor-in-Chief
S. Andrievsky

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