

**XXII Gamow International Astronomical Conference-School**  
**"ASTRONOMY AND BEYOND: ASTROPHYSICS,**  
**COSMOLOGY AND GRAVITATION, ASTROPARTICLE PHYSICS,**  
**RADIOASTRONOMY AND ASTROBIOLOGY"**  
**22 - 26 AUGUST, 2022**  
**ODESSA, UKRAINE**



**Organizers:** Odessa I.I.Mechnikov National University (Astronomical Observatory, Department of Theoretical Physics and Astronomy of the Faculty of Mathematics, Physics and Information Technologies), Radio-Astronomical Institute of NASU, Ukrainian Astronomical Association (UAA), Odessa National Maritime University, Odessa Astronomical Society.

**SCIENTIFIC ORGANIZING COMMITTEE:**

**Chairs of SOC:** V.M. Shulga (IRA NASU, Kharkov)

**Vice-chair:** M.I. Ryabov (IRA NASU, Odessa, [ryabov-uran@ukr.net](mailto:ryabov-uran@ukr.net))

**Secretary:** S.M. Melikyants (ONU, Odessa, [sedamelikk@gmail.com](mailto:sedamelikk@gmail.com))

**Members of SOC:** V.M.Adamyan (ONU, Odessa), S.M.Andrievsky (ONU, Odessa, Institute of Astronomy and Astrophysics, Tuebingen University, Germany), I.L.Andronov (ONMU, Odessa), M. Capaccioli (Naples University, Italy), S.V.Chebotar (ONU, Odessa), L.L.Jenkovszky (ITP, Kiev), K.Georgieva (Space Research and Technologies Institute, Sofia, Bulgaria), N.I.Koshkin (ONU, Odessa), I.Kudzej (Vihorlat observatory Humenne, Slovakia) T.V Mishenina (ONU, Odessa), I.Shmeld (VIRAC, Latvia), S.Silich (INAOE, Puebla, Mexico), O.M.Ulyanov (IRA NASU, Kharkov), I.B.Vavilova (MAO NANU, Kiev), Y.S.Yatskiv (MAO

NANU), V.V Zakharenko (IRA NASU, Kharkov), A.I. Zhuk (ONU, Odessa; CASUS, Germany).

## **LOCAL ORGANIZING COMMITTEE**

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

**Vice-chairs of LOC:** M.I. Ryabov ([ryabov-uran@ukr.net](mailto:ryabov-uran@ukr.net)),

**Secretary:** A.A Pilipenko ([plpnko@ukr.net](mailto:plpnko@ukr.net))

**Members of LOC:** V.V. Breus, A.Yu. Burgazli, A.V. Dragunova, V.G. Komentant, N.I. Koshkin, L.S. Kudashkina, S.M. Melikyants, L.I. Sobitnyak, S.L. Strakhova, A.L. Sukharev, V.O. Yushchenko.

**The XXIst Gamow conference-school is devoted to:**

- the 115-th anniversary of prof. V.P. Tsesevich (Director of the Astronomical Observatory of Odessa I.I. Mechnikov State University in 1944 – 1983 years);
  - the 90th anniversary of the registration by K. Jansky of cosmic radio emission and of the beginning of radio astronomy era;
  - 100-th anniversary of the A.A. Friedmann's model of the nonstationary Universe;
  - 30-th anniversary of the Odessa Astronomical Society.

**Main scientific topics:**

cosmology, gravitation, astroparticle physics, high energy physics, astrophysics, plasma astrophysics, radioastronomy, solar activity and solar-terrestrial relations, Solar system, astrobiology.

**Sections:**

1. Cosmology, gravitation, astroparticle physics, high energy physics (Chair – *A.I. Zhuk*);
2. Astrophysics (Chair – *I.L.Andronov, T.V.Mishenina*);  
Subsection «Astroinformatics» (Chair – *I.B.Vavilova*);
3. Radioastronomy (Chair – *O.M.Ulyanov, O.A.Litvinenko*);
4. Sun, Solar activity, Solar-terrestrial relations and Astrobiology (Chair – *V.M.Efimenko, M.I.Ryabov*);
5. Solar system and space environment (Chair – *N.I.Koshkin*);

- 6. Biologic section “Gamow's ideas in 21st century biology” (Chair – S.V.Chebotar);**
- 7. “Ukrainian planetarium association and astronomical education” (Chair – G.V.Zheleznyak).**

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

- Plenary reports on anniversaries.
- Plenary sessions – the 40 minutes lectures about the actual problems of astrophysics, cosmology, radioastronomy, astroparticle physics and gravitation.
- Special session in honor of prof. V.P. Tsesevich.
- Section meetings with 15-20 minutes reports.
- The affiliate sections and subsections.
- Discussions.

For participants there will be also organized a “poster session” in the form of short oral reports (5-8 minutes).

### **Publications:**

The templates of abstracts and manual about how to send them are available on <http://gamow.odessa.ua/publications>.

Scientific articles based on plenary and section reports are proposed to be published in the current issue of «Odessa Astronomical Publications» (<http://oap.onu.edu.ua/>), which will be completed this year.

We also plan to publish reports on radioastronomy in «Radioastronomy and Radiophysics» in this year.

**Conference working language is English!**

### **IMPORTANT CONFERENCE EVENTS**

<b>First Announcement</b>	<b>10 July</b>
<b>Open Registration</b>	<b>10 July</b>
<b>Second Announcement</b>	<b>30 July</b>
<b>Third Announcement</b>	<b>15 August</b>
<b>Final registration</b>	<b>10 August (deadline)</b>
<b>Abstract submission</b>	<b>10 August (deadline)</b>
<b>The Conference opening</b>	<b>22 August</b>
<b>The Conference closing</b>	<b>26 August</b>

Detailed information on the website: [www.gamow.odessa.ua](http://www.gamow.odessa.ua)

## REGISTRATION FORM

**Personal information:****First Name:** \_\_\_\_\_**Last Name:** \_\_\_\_\_**Title (Prof., Dr., PhD-student, MSc., BSc., Undergraduate student, etc.):**  
\_\_\_\_\_  
\_\_\_\_\_**Institution:** \_\_\_\_\_  
\_\_\_\_\_**Department:** \_\_\_\_\_  
\_\_\_\_\_**Country:** \_\_\_\_\_**E-mail address:** \_\_\_\_\_**2. Contribution:****Would you like to present a contribution? (YES/NO):** \_\_\_\_\_**If YES, please, write us the preliminary Title of your talk  
and Section (required):**  
\_\_\_\_\_  
\_\_\_\_\_**Please, fill the form and send it to us before August 10, 2022 to Seda  
Melikyants:****e-mail:** [sedamelikk@gmail.com](mailto:sedamelikk@gmail.com)  
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## **ABSTRACTS**

For the abstract template, see the web page <http://gamow.odessa.ua/publications/>

Please notice that the abstracts should include title, author and co-authors, its their affiliations and text (not more than 300 words). Please don't use any figures or tables. Note! All abstracts should be written in English. Participants who have been registered will be sent an invitation with reminder. The texts of abstracts can be directly sent to the publishing group or personally to **Svetlana Strakhova** ([okioao26@gmail.com](mailto:okioao26@gmail.com)). The Scientific Organizing Committee will inform you about the inclusion of the report in the program.

## **CONTACTS:**

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**Secretary: [sedamelikk@gmail.com](mailto:sedamelikk@gmail.com)**

**Web-site: [www.gamow.odessa.ua](http://www.gamow.odessa.ua)**