

**XXI Gamow International Astronomical Conference-School**  
**"ASTRONOMY AND BEYOND: ASTROPHYSICS,  
COSMOLOGY AND GRAVITATION, ASTROPARTICLE PHYSICS,  
RADIOASTRONOMY AND ASTROBIOLOGY"**

**15 - 21 AUGUST, 2021**  
**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, Ukrainian office of the International Public Organization "Astronomical Society", Odessa Astronomical Society, Southern Scientific Centre of NASU.

**SCIENTIFIC ORGANIZING COMMITTEE:**

**Co-chairs of SOC:** G.S.Bisnovatyi-Kogan, V.M.Shulga

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

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

**Members of SOC:** V.M.Adamyany (ONU, Odessa), S.M.Andrievsky (ONU, Odessa), I.L.Andronov (ONMU, Odessa), Felix Aharonian (Germany), N.G.Bochkarev (SAI MSU, Moscow), M. Capaccioli (Naples University, Italy), A.M.Cherepashchuk (SAI MSU, Moscow), S.V.Chebotar (ONU, Odessa), L.L. Jenkovszky (ITP, Kiev), K.Georgieva (Space Research and Technologies Institute, Sofia, Bulgaria), A.A.Konovalenko (IRA NASU,

Kharkov), N.I.Koshkin (ONU, Odessa), I.Kudzej (Vihorlat observatory Humenne, Slovakia) T.V Mishenina (ONU, Odessa), V.N.Obridko (IZMIRAN, Moscow), Tsvi Piran (Izrael), S.Silich (INAOE, Puebla, Mexico), A.V.Stepanov (Pulkovo Observatory RAS, Saint-Petersburg), I.B.Vavilova (MAO NANU), Y.S.Yatskiv (President of UAA, Kiev) , V.V Zakharenko (IRA NASU, Kharkov), A.I. Zhuk (ONU, Odessa), I.Shmeld (VIRAC, Latvia).

The list of members of the Scientific Organizing Committee will be supplemented in the Second Announcement.

### **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)),  
V.P. Olyeynik ([olyeyvp@onu.edu.ua](mailto:olyeyvp@onu.edu.ua))

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

**Members of LOC:** A.Yu. Burgazli, A.V. Chopovsky, A.V. Dragunova, T.I. Kabanova, V.G. Komendant, N.I. Koshkin, , L.S. Kudashkina, S.M Melikyants, B.A. Murnikov, L.I. Sobitnyk, S.L. Strakhova, A.L. Sukharev, V.O. Yushenko.

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

- the 150th anniversary of the Astronomical Observatory of Odessa I.I. Mechnikov National University;
- the 90th anniversary of the registration by K. Jansky of cosmic radio emission and of the beginning of radio astronomy;
- the 75th anniversary of G. Gamow's hot "big bang" theory of the expanding universe;
- the 60th anniversary of the beginning of the Era of space flights;
- the 125th anniversary of the Odessa astronomer V.S. Zhardetsky;
- the memory of Prof. A.D. Chernin, the member of the SOC and the participant of all Gamow conferences-schools in Odessa.

**Main scientific topics**

Cosmology, gravitation, astroparticle physics, high energy physics, astrophysics, plasma astrophysics, radio astronomy, Solar activity and Solar-terrestrial relations, Solar system, astrobiology.

## Sections:

1. Cosmology, gravitation, astroparticle physics, high energy physics (the Chairman – *A.I. Zhuk*);
2. Astrophysics (the Chairmen – *I.L.Andronov, T.V.Mishenina*);  
Subsection «Astroinformatics» (the chairman – *I.B.Vavilova*);
3. Radioastronomy (the Chairmen – *O.M.Ulyanov, O.A.Litvinenko*);
4. Sun, Solar activity, Solar-terrestrial relations and Astrobiology (the Chairmen – *V.M.Efimenko, M.I.Ryabov*);
5. Solar system and space environment (the chairman – *N.I.Koshkin*);
6. Biologic section “Importance of G. Gamow's Ideas for Biology in 21st Century” (the Chairman – *S.V.Chebotar*);
7. “Ukrainian planetarium association and astronomical education” (the Chairman – *G.V.Zheleznyak*).

## The Conference Program will be organized in the form of:

- Plenary reports on anniversaries;
- Plenary sessions –the 40 minutes lectures about the actual problems of astrophysics, cosmology, radioastronomy, astroparticle physics and gravitation;
- Section meetings with 15-20 minutes reports;
- The affiliate sections and subsections;
- Discussions.

For participants there will be organized a poster session included short oral reports (5-8 minutes). Posters – 1 page of the A1 format (60x84 cm) or up to 8 pages of the A4 format. All presentations have to be in English.

The best reports of young participants will be awarded by special prizes by Scientific and Local Organizing Committee, Ukrainian Astronomical Association and Odessa Astronomical Society.

We invite young scientists, students, and graduate students to take part in our conference. This is a good scientific experience, a new level of physical understanding and new acquaintances.

## Publications:

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

The plenary and section reports of the Conference will be published in the «Odessa Astronomical Publications» (<http://oap.onu.edu.ua/>) in this year.

Some Plenary report planned will be published in the international journal «Astronomy and Astrophysics Transactions».

Publication reports of radioastronomy section possibility in « Radioastronomy and Radiophysics» in this year.

**Attention!** Only papers that were presented on the Conference will be published.

The conference is planned submission of reports in online and offline mode. Conference working languages: english, ukrainian, russian.

### Conference venue:

Due to the unclear situation with COVID-19 and the possibility of the arrival of foreign participants, information about the venue of the conference-school meetings and accommodation will be given in the Third Announcement.

### ИЮЛЬ

## IMPORTANT CONFERENCE EVENTS

First Announcement	15 May
Open Registration	25 May
Second Announcement	15 June
Third Announcement	15 July
Final registration	15 July (deadline)
Abstract submission	15 July (deadline)
Arrival day	15 August
The Conference opening	16 August
The Conference closing	20 August
Excursions day	21 August
Departure day	21 August

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

### Cultural Events

There will be available a lot of different cultural and social events, like visiting of Opera House, a variety of tours around the city and the coast, dolphinarium "Nemo", aquarium, boat trips along the coast etc.

## Contacts:

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

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