

## SECOND MESSAGE

XVII Gamow Conference-School  
"Astronomy and beyond: Astrophysics, Cosmology,  
Cosmomicrophysics, Astroparticle Physics, Radioastronomy and  
Astrobiology"

13 - 20 August 2017  
Odessa, Ukraine

**Organizers:** Odessa I.I.Mechnikov National University (Astronomical Observatory and Theoretical Physics and Astronomy Department), Radio-Astronomical Institute NASU of Ukraine, Ukrainian Astronomical Association, Euro-Asian Astronomical Society, Russian Gravitational Society, Odessa Astronomical Society, South Scientific Centre of NAS of Ukraine.

### Scientific Organizing Committee

#### Co-chairs of SOC

G.S.Bisnovatyi-Kogan (SRI RAS, Moscow, Russia, [gkogan@iki.rssi.ru](mailto:gkogan@iki.rssi.ru))  
V.M.Shulga (IRA NASU, Kharkov, Ukraine, [shulga@rian.kharkov.ua](mailto:shulga@rian.kharkov.ua))

#### Vice-chairs

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M.I.Ryabov (AO IRA NASU, Odessa, Ukraine, [ryabov-uran@ukr.net](mailto:ryabov-uran@ukr.net))  
Secretary:  
S.M.Melikyants (AO ONU, Odessa, Ukraine, [seda-melik@yandex.ru](mailto:seda-melik@yandex.ru))

#### Members of SOC

V.M.Adamyan, S.M.Andrievsky, I.L.Andronov, N.G.Bochkarev, I.B.Vavilova, A.G.Zagorodnyy, V.V.Zakharenko, V.A.Zakhozhay, V.A.Ivanitsa, A.A.Konovalenko, V.V.Kovtyuh, V.N.Melnikov, T.V.Mishenina, V.N.Obridko, A.M.Cherepashchuk, A.D.Chernin, Ya.S.Yatskiv.

## Local Organizing Committee

**Chair:** M.I. Ryabov

**Vice-Chair:** V.P.Oleynik

**Secretary:** A.A Pilipenko

### Members of LOC

M.D.Brilenkov, R.D.Brilenkov, A.Yu.Burgazli, N.I.Koshkin, L.S.Kudashkina,  
S.L.Strahova, A.D.Sukharev, V.V.Troyanskiy, V.G.Komendant,  
S.M.Melikyants, B.A.Murnikov, A.V.Dragunova, V.A.Yuschenko,  
A.V.Chopovskiy.

The 17th Gamow conference-school is devoted to:

- the 110th anniversary of the corresponding member of Ukrainian Academy of Science professor V. Tsesevich;
- the 100th anniversary of the cosmological constant in Einstein equations;
- the 50th anniversary of pulsars' discovery;
- the 30th anniversary of supernova explosion in a Large Magellanic Cloud.

## Main scientific topics

**Scientific topics:** cosmology, gravitation, astroparticle physics, astrophysics, radioastronomy, Solar activity and Solar-Earth interaction, Solar system, astrobiology.

It's planned to create the meetings:

- round table "Astronomy in Europe - presence and perspectives" (the chairmen - Ya.S.Yatskiv and I.V.Vavilova);
- discussion "Astronomical education in Ukraine - problems and solutions" (the chairmen - Ya.S.Yatskiv, B.S.Novosyadlyy, V.A.Zakhozhay, M.I.Ryabov).

## Sections

1. Cosmology, particle physics, cosmomicrophysics (the chairmen - A.I.Zhuk and B.S.Novosyadlyy).

2. Astrophysics: interacting binary systems, variable stars (the chairman - L.I.Andronov).
  - a. Subsection "Stellar atmospheres" (the chairman - T.V.Mishenina).
  - b. Subsection "Astroinformatics" (the chairman - I.B.Vavilova).
  - c. Subsection "Active galactic nuclei" (the chairmen - M.I.Ryabov, I.B.Vavilova).
3. Radioastronomy (the chairman - O.A.Litvinenko).
  - a. Subsection "The pulsars" (the chairman - O.M.Ulianov).
4. Solar activity and solar-earth interaction, astrobiology (the chairmen - V.M.Efimenko, M.I.Ryabov).
5. Solar system (the chairman - N.I.Koshkin).
  - a. Subsection "Near-Earth space" (the chairman - N.I.Koshkin).
6. Subsection "Ukrainian planetarium association and astronomical education" (the chairman - V.A.Zahozhay, the secretary - G.V.Zheleznyak).

### **The Conference Program**

The Conference Program will be organized in the form of:

- plenary session - the 40 minutes lectures about the actual problems;
- section meetings with 15-20 minutes reports;
- the affiliate sections and subsections;
- discussions.

For participants there will be organized **a poster session** included short reports. The best reports of young participants will be awarded by special prizes by Scientific and Local Committee, Ukrainian Astronomical Association and Odessa Astronomical Society.

### **The preliminary list of plenary speeches**

Devoted to the 110th anniversary of the corresponding member of Ukrainian Academy of Science professor V. Tsesevich:

- Ya.S.Yatskiv, A.A.Korsun (MAO NASU) "V.P.Tsesevich - a corresponding member of Academy of Sciences of Ukraine";
- I.L.Andronov (Odessa National Maritime University) "Vladimir Platonovich Tsesevich – a Prominent Scientist, Teacher, Popularizer and Organizer of Science".

## Plenary Speeches

1. G.S.Bisnovatyj-Kogan (SRI RAS) "30year of the Supernova Outburst in the Large Magellanic Cloud – Modern Ideas About the Supernova Outbursts".
2. A.D.Chernin (SAI MSU) "100th anniversary of the Einstein cosmological constant".
3. V.V.Zakharenko (IRA NASU) "Anniversary of Discovery of Pulsars. 50 Years of Research of the Era of Transients".
4. I.L.Andronov (Odessa National Maritime University) "Odessa Scientific School of Researchers of Variable Stars: from V.P.Tsessevich to Our Days".
5. L.Marochnik (University of Maryland, USA) "Dark Energy and Inflation from Gravitational Waves".
6. Yu.L.Bolotin (A.I.Akhieser Institute of Theoretical Physics, KhPhTI) "Limiting Values as a Universal Method of Description of Physical Reality".
7. B.S.Novosiadlyi (I.Franko Lviv National University) "Can Voids Unveil the Nature of Dark Energy?".
8. V.I.Zhdanov (Taras Shevchenko Kyiv National University, Ukraine) "Gravitational Lensing and Structure of Compact Objects".
9. A.A.Pankov, A.V. Tsytrinov (The Abdus Salam ICTP Affiliated Centre, Technical University of Gomel, Belarus) "Spin and model determination of extra neutral gauge bosons at LHC and ILC".
10. A.V. Tsytrinov (The Abdus Salam ICTP Affiliated Centre, Technical University of Gomel, Belarus) "Prospects of tracks reconstruction with a new method based on deep learning neural networks at NICA detector".
11. L.L. Jenkovszky (N.N. Bogolyubov Institute for Theoretical Physics) "New Trends in High Energy Physics".
12. K. Lukin (IRE NASU), M. Martin-Neira, V.Kudriashov, Yu.Bolotin "Event Horizon Imaging Experiment".
13. L.I.Miroshnichenko (IZMIRAN) ) "Extremal Solar Events: Discussion of Their Nature and Properties".
14. V.G. Lozitskiy (AO, Taras Shevchenko Kiev National University) "Extremely Strong Magnetic Fields in Solar Flares".
15. M.I.Ryabov (RI NASU) "Variability of the Sun. Observational Justification of Continuity of the Solar Activity".

**Conference Publications.** It is planned to publish the Abstract Book. The publications based on reports of the 16th Gamow Summer School are available here: <http://gamow.odessa.ua/2016-publications>.

**Registration** is available online here: [gamow.odessa.ua/registration-2](http://gamow.odessa.ua/registration-2).

### **Abstracts**

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

### **Conference Events**

I announcement	10-04-2017
II announcement	01-07-2017
III announcement	01-08-2017
Final registration	10-07-2017
Abstract submission	10-07-2017
Arrival day	13-08-2017
Begin of the conference	14-08-2017
Last working day and conference closing	19-08-2017
Day of departure	20-08-2017

### **Conference Fee**

The conference fee is:

- for participants from Ukraine and Moldova is 350 UAH (150 UAH for students and PhD students, 100 UAH for accompanying persons);
- for participants from Russia, Belarus, Kazakhstan and other countries of CIS is \$30 (\$15 for students, PhD students, \$10 for accompanying persons);
- for participants from East-European countries – €50 (€20 for students, PhD students and accompanying persons);
- for participants from the countries of European Union and United States of America – \$200 or €180 (\$100 or €90 for students, PhD students and accompanying persons);

The conference materials, receptions and coffee breaks are included to the conference fee.

### **Cultural Events**

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

### **Conference Venue**

The Conference and School will be held in the Sports and Recreation Centre of Odessa National University "Chernomorka" on the bank of the Black Sea (15 km far from the center of the city). Participants will have the possibility to live either in the Chernomorka or in a comfortable pension "Soviniyon" and a SPA hotel "Grand Marine".

The additional information is available here:  
<http://gamow.odessa.ua/logistics>.

### **Contacts**

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Feel free to contact us about any questions!