

**6-th Gamow International Conference in Odessa  
“New Trends in Astrophysics, Cosmology and HEP after Gamow”  
and**



**19-th Gamow Summer School  
“Astronomy and beyond: Astrophysics, Cosmology,  
Radioastronomy and Astrobiology”**

**11 – 18 August, 2019  
Odessa, Ukraine**

**EVENTS**

**Sunday, 11.08.2019**

- 09.00 – 22.00 Registration of participants  
20.00 – 22.00 **Evening session** (*conference hall of ONU recreation center «Chernomorka»*):  
– **MENDELEEV, GAMOW AND ODESSA (MENDELEEV PERIODIC  
TABLE OF CHEMICAL ELEMENTS: 150 TH ANNIVERSARY)** – *I.E.Rikun*  
– **IAU 100 YEAR CELEBRATION – IAU100 NAMEEXOWORLDS  
GLOBAL CAMPAIGN** – *I.B.Vavilova*  
– **50<sup>th</sup> ANNIVERSARY OF THE MOON LANDING – HISTORY AND  
FUTURE, ASTRONOMICAL SOCIETY NEWS** – *M.I.Ryabov*  
– **INFORMATIONS AND DISCUSSIONS**

**Monday, 12.08.2019**

- 05.51 Sunrise**  
09.00 – 13.00 Registration of participants  
09.30 – 10.00 **OPENING OF THE CONFERENCE**  
10.00 – 11.00 **Memorial session**  
11.00 – 11.20 Coffee break  
11.20 – 12.50 **Plenary session**  
12.50 – 13.00 *Photographing of participants*  
13.00 – 14.30 Lunch  
14.30 – 16.10 **Section session**  
16.10 – 16.30 Coffee break  
16.30 – 18.10 **Section sessions**  
18.30 – 19.30 Dinner  
19.30 – 20.30 *Music concert*  
**20.14 Sunset**  
21.00 – 23.00 *Welcome Party*  
**The maximum of the Perseid Meteor Shower**

**Tuesday, 13.08.2019**

- 05.52 Sunrise**  
09.30 – 11.00 **Plenary session**  
11.00 – 11.20 Coffee break  
11.20 – 12.50 **Plenary session**  
13.00 – 14.30 Lunch  
14.30 – 16.10 **Section sessions**  
16.10 – 16.30 Coffee break

16.30 – 18.10 **Section sessions**

18.30 – 19.30 Dinner

**20.12** **Sunset**

**Wednesday, 14.08.2019**

**05.53** **Sunrise**

09.30 – 11.00 **Plenary session**

11.00 – 11.20 Coffee break

11.20 – 12.50 **Discussion «Space vision of Ukraine»**

13.00 – 14.30 Lunch

14.30 – 16.10 **Section sessions**

16.10 – 16.30 Coffee break

16.30 – 18.10 **Section sessions**

18.30 – 19.30 Dinner

19.30 – 22.30 *Excursion in the evening Odessa, sea walk*

**20.10** **Sunset**

**Thursday, 15.08.2019**

**05.55** **Sunrise**

09.30 – 11.00 **Plenary session**

11.00 – 11.20 Coffee break

11.20 – 12.50 **Plenary session**

13.00 – 14.30 Lunch

14.30 – 16.10 **Section sessions**

16.10 – 16.30 Coffee break

16.30 – 18.10 **Section sessions**

18.30 – 19.30 Dinner

**20.09** **Sunset**

20.00 – 23.00 *Conference Dinner*

**Friday, 16.08.2019**

**05.56** **Sunrise**

09.30 – 11.00 **Plenary session**

11.00 – 11.20 Coffee break

11.20 – 12.50 **Plenary session and CLOSE GAMOW'S CONFERENCE**

13.00 – 14.30 Lunch

14.30 – 16.10 **Section sessions**

16.10 – 16.30 Coffee break

16.30 – 18.10 **Section sessions**

18.30 – 19.30 Dinner

19.30 – 22.30 *Wine tasting at the Tairov institutes*

**20.07** **Sunset**

**Saturday, 17.08.2019**

**05.57** **Sunrise**

*Excursion day: Gamow and Mendeleev places in Odessa*

**20.05** **Sunset**

**Sunday, 18.08.2019**

**05.58** **Sunrise**

**Departure**

**20.04** **Sunset**

# AGENDA

## SECTIONS:

- 1. Cosmology, Gravitation, Astroparticle Physics, High Energy Physics, Cosmomicrophysics**  
(*Conveners – V.M.Shulga, B.S.Novosyadly*) **August, 12-13**
  - 2. Astrophysics** (*Conveners – I.L.Andronov, T.V.Mishenina*) **August, 12-13**  
Subsection «**Astroinformatics**» (*Convener I.B.Vavilova*) **August, 13, 16**
  - 3. Radioastronomy** (*Conveners – O.A.Litvinenko, O.M.Ulyanov*) **August, 14-15**
  - 4. Sun, Solar Activity, Solar-terrestrial Relations and Astrobiology**  
(*Conveners – V.M.Efimenko, M.I.Ryabov*) **August, 16**
  - 5. Solar System and Space Environment**  
(*Convener – N.I.Koshkin*) **August, 14-15**
- Attached Section “**Ukrainian Planetarium Association**”  
(*Conveners – V.A.Zakhozhay, G.V.Zheleznjak*) **August, 13-14**
- Biologic section “**Importance of G. Gamow's Ideas for Biology in 21st Century**”  
(*Convener – S.V.Chebotar*) **August, 12**

## **ATTENTION!**

### Presentation new publications:

- A.D.Chernin* “G.Gamow – physics, cosmology, genetics” (on Russian)
- I.E.Rikun* “Gamow and his Family”, “Gamows theacher” (on Russian)
- M.I.Ryabov* “25<sup>th</sup> Anniversary of Odessa Gamow Conference” (on Russian)

**Oral history interview with George Gamow, 1968 April 25 and 26. by Gamow, George, 1904-1968.**

<https://www.aip.org/history-programs/niels-bohr-library/oral-histories/4325>

## SCHEDULE OF THE PLENARY AND SECTION SESSIONS

**12 – 16 August** *Conference Hall «Grand Marine»*

**9.30 – 13.00** **Plenary sessions**

**13 August** *Conference Rooms of the Sports and Recreation Centre "Chernomorka" (2 floor)*

**19.00** **Meeting Council of the Ukrainian Astronomical Association**  
(Convener – President of UAA Ya.S. Yatskiv)

**14 August** *Conference Hall «Grand Marine»*

**11.20 – 12.50** **Discussion «Space vision of Ukraine»** (Convener – O.P.Fedorov)

**This is an important event during the conference.**

### Section sessions (12–16 August):

*Conference Rooms of the Sports and Recreation Centre "Chernomorka"*

Data Section	12.08	13.08	14.08	15.08	16.08
Section 1. <b>Cosmology, Gravi- tation, Astroparticle Physics, High Energy Physics</b>	<b>14.30–18.10</b> Conference Room (1 floor)	<b>14.30–18.10</b> Conference Room (1 floor)			
Section 2. <b>Astrophysics</b>	<b>14.30–18.10</b> Conference Room (2 floor)	<b>14.30–16.10</b> Conference Room (2 floor)			
Subsection "Astroinformatics"		<b>16.30–18.10</b> Conference Room (2 floor)			<b>14.30–16.10</b> Conference Room (1 floor)
Section 3. <b>Radioastronomy</b>			<b>14.30–18.10</b> Conference Room (2 floor)	<b>14.30–18.10</b> Conference Room (1 floor)	
Section 4. <b>Sun, Solar Activity, Solar-terrestrial Relations and Astrobiology</b>					<b>14.30–18.10</b> Conference Room (2 floor)
Section 5. <b>Solar System and Space Environment</b>			<b>14.30–18.10</b> Conference Room (1 floor)	<b>14.30–18.10</b> Conference Room (2 floor)	
Attached Section. "Ukrainian Planetarium Association"		<b>09.30–13.00</b> Conference Room (2 floor)	<b>09.30–13.00</b> Conference Room (2 floor)		
Biologic section. "Importance of G. Gamow's Ideas for Biology in 21st Century"	<b>14.30–18.00</b> Grand Marin Conference Room (2 floor)				

# PROGRAM

## Monday, 12.08.2019

**09:30 – 10:00**      **OPENING OF THE CONFERENCE, MEMORIAL REPORTS AND GREETING TALKS** (*Conference Hall “Grand Marine”*)

**Convener – V.M.Shulga**

Greetings of the Rector of the Odessa I.I. Mechnikov University *I.N.Koval*

Greetings of the President of the Ukrainian Astronomical Association *Ya.S.Yatskiv*

**10:00 – 11:00**      **MEMORIAL SESSION** (*Conference Hall “Grand Marine”*)

*Ryabov M.I.* 25<sup>th</sup> ANNIVERSARY OF ODESSA GAMOW CONFERENCE

*Fisher E.P.* A PHYSICIST LOOKS AT BIOLOGY (UNDERSTANDING THE GENES AND GAMOW'S CONTRIBUTION)

*Andrievsky S.M.* ORIGIN AND EVOLUTION OF CHEMICAL ELEMENTS IN UNIVERSE (MENDELEEV PERIODIC TABLE OF CHEMICAL ELEMENTS: 150TH ANNIVERSARY)

**11:00 – 11:20**      *Coffee break*

**11:20 – 12:50**      **PLENARY SESSION** (*Conference Hall “Grand Marine”*)

*Chernin A.D.* EINSTEIN UNIVERSAL ANTI-GRAVITY

*Novosyadlyj B.S.* DARK AGES: FORMATION OF HALOS AND POSSIBILITY OF THEIR OBSERVATION

*Zhuk A.I.* THE FORM OF THE GRAVITATIONAL POTENTIAL IN FLAT, OPEN AND CLOSED UNIVERSES

## Tuesday, 13.08.2019

**09:20 – 11:00**      **PLENARY SESSION** (*Conference Hall “Grand Marine”*)

*Bisnovatyj-Kogan G.S.* BLACK HOLE SHADOWS FROM NEARBY AND COSMOLOGICAL OBJECTS

*Capaccioli M.* ON THE OURSKIRTS OF GALAXIES

*Andronov I.L.* VARIABLE STARS: A NET OF COMPLEMENTARY METHODS FOR TIME SERIES ANALYSIS

**11:00 – 11:20**      *Coffee break*

**11:20 – 12:50**      **PLENARY SESSION** (*Conference Hall “Grand Marine”*)

*Aharonian F.* GALACTIC COSMIC RAY FACTORIES

*Dzhatdoev T.A.* THE STATE OF ASTROPARTICLE PHYSICS BEFORE THE START OF THE CTA EXPERIMENT

*Piran T.* NUCLEOSYNTHESIS 70 YEARS AFTER GAMOW

## Wednesday, 14.08.2019

### **09:20 – 11:00**      **PLENARY SESSION** (*Conference Hall “Grand Marine”*)

*Shchukina N.* GROUND-BASED STUDIES OF THE SUN IN THE NEXT 10 YEARS: FROM ULTRAVIOLET TO INFRARED

*Zhdanov V.I., Stashko O.S.* TEST BODY ORBITS IN SPACE-TIMES AROUND RELATIVISTIC ASTROPHYSICAL CONFIGURATIONS WITH SCALAR FIELDS AND THE EVENT HORIZON TELESCOPE IMAGE OF THE BLACK HOLE SHADOW

*Pankov A.* IMPROVED CONSTRAINTS ON THE MIXING AND MASS OF EXTRA GAUGE BOSONS FROM RESONANT DIBOSON SEARCHES AT THE LHC AT 13 TEV USING THE RUN-2 ATLAS DATASET

### **11:00 – 11:20**      *Coffee break*

### **11:20 – 12:50**      **DISCUSSION «SPACE VISION OF UKRAINE»** (*Conference Hall “Grand Marine”*)

## Thursday, 15.08.2019

### **09:30 – 11:00**      **PLENARY SESSION** (*Conference Hall “Grand Marine”*)

*Rosinska D.* NEWS FROM GRAVITATIONAL WAVES ASTRONOMY

*Zakharenko V.V.* DECAMETER PULSAR/TRANSIENT SURVEY OF NORTHERN SKY. RESULTS OF TRANSIENT SEARCHING.

*Perlick V.* INFLUENCE OF A PLASMA ON GRAVITATIONAL LENSING

### **11:00 – 11:20**      *Coffee break*

### **11:20 – 12:50**      **PLENARY SESSION** (*Conference Hall “Grand Marine”*)

*Shchukina N.G., Osipov S.N., Kostik R.I.* LONG-TERM MONITORING OF SPECTRAL LINE VARIATIONS WITH THE 11-YEAR CYCLE. QUIET SUN

*Stodilka M.* ENERGETICS OF PHOTOSPHERE JETS IN THE QUIET ATMOSPHERE OF THE SUN

*Oknyansky V.L., Winkler H., Tsygankov S.S., Lipunov V.M., Gorbovskoy E.S., F. van Wyk, Buckley D.A.H., Tyurina N.V.* DISCOVERY OF THE NEW CHANGING LOOK CASES IN NGC 1566

## Friday, 16.08.2019

### **09:30 – 11:00**      **PLENARY SESSION** (*Conference Hall “Grand Marine”*)

*Mkrtichian D.* THE oEA PULSATORS: RESULTS FROM TESS SPACE TELESCOPE

*Miroshnichenko L.* SUN-EARTH PROBLEM: MODERN CONCEPTS AND PHYSICAL MECHANISMS

*Jenkovszky L.* GLUEBALL SPECTROSCOPY IN CENTRAL EXCLUSIVE DIFFRACTIVE PRODUCTION

### **11:00 – 11:20**      *Coffee break*

### **11:20 – 12:50**      **PLENARY SESSION** (*Conference Hall “Grand Marine”*)

*Georgieva K.* SCOSTEP'S SCIENTIFIC PROGRAMS VARSITI AND PRESTO

*Eglitis I.* BALDONE OBSERVATORY IN THE CIRCLES OF TIME

### **12:50 – 13:00**      **CLOSING OF THE CONFERENCE**

## SECTION SESSIONS

### COSMOLOGY, GRAVITATION, HIGH ENERGY PHYSICS, ASTROPARTICLE PHYSICS

**Monday, 12.08.2019**

**14:30 – 16:10 Section session** (*Conference Room in “Chernomorka”, 1 floor*)

**Convener** – *B.S.Novosiadlyi*

1. *Ryazantsev G.B., Lavrenchenko G.K., Beckman I.N., Nedovesov S.S., Khaskov M.A.* THE PROBLEM OF "ZERO" IN THE WORKS OF D.I. MENDELEEV. NEUTRON MATTER AND ITS PLACE IN THE PERIODIC TABLE OF CHEMICAL ELEMENTS
2. *Ryazantsev G.B., Khaskov M.A., Lavrenchenko G.K., Beckman I.N., Nedovesov S.S.* THREE-DIMENSIONAL (3-D) VERSION OF THE PERIODIC SYSTEM OF CHEMICAL ELEMENTS: THE FLOWER OF MENDELEEV
3. *Burduzha V.* CREATION OF THE UNIVERSE AND OCCURRENCE OF BARYON ASYMMETRY
4. *Gladush V.D.* CLASSICAL DESCRIPTIONS OF THE GEOMETRODYNAMICS OF CHARGED BLACK HOLES
5. *Olyeynik V.P.* ON THE DEGREES OF FREEDOM OF GRAVITATIONAL FIELD IN GR AND VARIATION TOOLS IN TETRAD REPRESENTATION
6. *Chopovsky A.* MULTIDIMENSIONAL BRANS-DICKE GRAVITY IN THE WEAK-FIELD LIMIT
7. *Burgazli A.Y.* IMPLEMENTATION OF GRAVITATIONAL POTENTIAL SCREENING AT LARGE SCALES IN AN N-BODY CODE
8. *Dmytriiev M.S., Gladush V. D.* T-SOLUTIONS OF THE 5D KALUZA-KLEIN MODEL

**16:10 – 16:30 Coffee break**

**16:30 – 18:10 Section session** (*Conference Room in “Chernomorka”, 1 floor*)

**Convener** – *V.D.Gladush*

9. *Rudakovskiy A., Savchenko D.* NEW MASS BOUND ON FERMIONIC DARK MATTER FROM A COMBINED ANALYSIS OF CLASSICAL DWARF SPHEROIDAL SATELLITE
10. *Kotvytskiy A.T., Bronza S.D., Shablenko V.Yu.* IMAGES DISTRIBUTION OF BINARY SYMMETRICAL GRAVITATIONAL LENS
11. *Bronza S.D., Korostelov Ye.M., Kotvytska L.A., Manko N.S.* CONSTRUCTION OF N-POINT GRAVITATIONAL LENSES BY THE METHOD COVER PROFILES
12. *Osmayev O.A., Bronza E.S., Matvienko K.I.* SOME COROLLARY FACTS OF THE N-POINT GRAVITATIONAL LENS EQUATION IN A COMPLEX FORM
13. *Panko E.A.* ALIGNMENT OF GALAXIES IN DIFFERENT KINDS OF SUBCLUSTERS
14. *Korshunov V., Panko E.A.* ALIGNMENT OF GALAXIES IN SUBCLUSTERS PLACED IN RICH REGIONS
15. *Zabolotnii V., Panko E., Korshunov V., Yemelianov Ya.* MORPHOLOGY SUBTYPES IN RICH GALAXY CLUSTER WITH INTERMEDIATE CONCENTRATION
16. *Dobrycheva D.V., Vasylenko M.Yu., Vavilova I.B., Melnyk O.V., Elyiv A.A.* THE AUTOMATED BINARY MORPHOLOGICAL CLASSIFICATION OF GALAXIES FROM SDSS

**Tuesday, 13.08.2019**

**14:30 – 16:10 Section session** (*Conference Room in “Chernomorka”, 1 floor*)

**Convener** – *V.I.Zhdanov*

17. *Uryson A.* EXTRAGALACTIC COSMIC RAY SOURCES WITH HARD SPECTRA AND THEIR STUDY
18. *Dzhatdoev T.A.* ELECTROMAGNETIC CASCADE MASQUERADE: ASTROPHYSICAL BACKGROUNDS FOR GAMMA-ALP OSCILLATION SEARCHES USING EXTREME TEV BLAZAR SPECTRA
19. *Podlesnyi E.I.* MASSIVE ARGON SPACE TELESCOPE (MAST): A CONCEPT OF THE NEXT-GENERATION GAMMA-RAY SPACE TELESCOPE
20. *Sergijenko O.* UKRAINE IN THE CHERENKOV TELESCOPE ARRAY (CTA) PROJECT
21. *Minaiev P., Skalozub V.* THE ELECTROWEAK PHASE TRANSITION AND SPONTANEOUS CREATION OF MAGNETIC FIELDS
22. *Tugay A.V., Shevchenko S.Yu.* INFRARED COUNTERPARTS OF X-RAY GALAXIES
23. *Doikov D.N., Yushchenko A.V.* OPTICAL LUMINOSITY OF ACTIVE GALACTIC NUCLEI AND THE INTENSITY OF ITS HARD RADIATION IN THE FORM OF PARTICLES AND QUANTA

**16.10 – 16.30 COFFEE BREAK**

**16.30 – 18.00 Section session** (*Conference Room in “Chernomorka”, 1 floor*)

**Convener** – *E.A.Panko*

24. *Skalozub V.* INDUCED COLOR CHARGES AND POTENTIALS IN MAGNETIZED QUARK-GLUON PLASMA AT A0 BACKGROUND
25. *Berdina L.A., Tsvetkova V.S.* THE EXTENDED SCATTERING ENVELOPE IN THE QSO 2237 + 0305 QUASAR
26. *Sergeyev A., Spiniello C., Napolitano N. R., Tortora C., Zheleznyak A. P.* THE KIDS STRONGLY LENSED QUASAR DETECTION PROJECT
27. *Beshley V., Petruk O.* NUMERICAL SIMULATIONS OF THE STOKES PARAMETERS OF SN 1006
28. *Kulinich Yu., Novosyadlyj B., Shulga V., Han W.* DARK AGES HALOS BRIGHTNESS IN ROTATIONAL LINES OF HEH+
29. *Savchenko D., Iakubovskiy D., Boyarsky A., Ruchayskiy O.* SURFACE BRIGHTNESS PROFILE OF THE 3.5 KEV LINE IN THE MILKY WAY HALO
30. *Siutsou I.* GRAVITATIONALLY INDUCED DECOHERENCE IN TIMED DICKE STATES

**POSTERS**

1. *Boyko Y.I., Kopyt N.Kh., Kopyt N.N.* ADDITIONAL MEANINGS OF THE TERM OF "UNIFORMITY" IN COSMOLOGICAL MODELS
2. *Bukalov A.* A SOLUTION TO THE DARK ENERGY PROBLEM AND THE EVOLUTION OF THE EARLY UNIVERSE
3. *Khramtsov V.P., Vasylenko M.Yu., Dobrycheva D.V., Vavilova I.B.* DEEP LEARNING FOR MORPHOLOGICAL CLASSIFICATION OF GALAXIES
4. *Makarov I.S.* SYSTEMIC LOGIC IN THEORETICAL ASTROPHYSICS
5. *Pankov A.A.* INTERNATIONAL NUCLEAR DATA CENTERS NETWORK AND PROSPECTS OF ITS USE IN NUCLEAR POWER IN BELARUS
6. *Turinov A.N.* MODELS OF VOIDS IN THE OBSERVABLE UNIVERSE



## ASTROPHYSICS

**Monday, 12.08.2019**

**14:30 – 16:10 Section session** (*Conference Room in “Chernomorka”, 2 floor*)

**Convener – T.V.Mishenina**

1. *Mishenina T.V., Basak N., Kovtyukh V.V.* CHEMICAL IMPRINTS IN ATMOSPHERIC ABUNDANCES OF PLANET- HOSTING STARS
2. *Butkovskaya V.V., Plachinda S.I.* MAGNETIC FIELD OF PULSATING STARS
3. *Velichko A.B., Fedorov P.N., Akhmetov V.S.* KINEMATICS OF MAIN SEQUENCE STARS IN THE SOLAR NEIGHBORHOOD FROM THE GAIA DR2 AND PMA DATA
4. *Gopka V., Yushchenko V., Yushchenko A., Jeong Y.* THE CHEMICAL COMPOSITION OF HIP 13962 – MAYBE THE FORMER MEMBER OF BINARY SYSTEM WITH SUPERNOVA
5. *Postnikova E.S., Kovaleva D.A.* THE SEARCH FOR CANDIDATES FOR DOUBLE OPEN CLUSTERS IN THE GALAXY
6. *Usenko I.A., Miroshnichenko A.S., Kovtyukh V.V., Danford S., Turner D.G.* POLARIS, THE NEAREST CEPHEID IN THE GALAXY: 130 YEARS OF RADIAL VELOCITY MEASUREMENTS, THE ORBITAL ELEMENTS SPECIFICATIONS AND PULSATION PERIODS SEARCH

**16:10 – 16:30 Coffee break**

**16:30 – 18:10 Section session** (*Conference Room in “Chernomorka”, 1 floor*)

**Convener – T.V.Mishenina**

7. *Tvardovskyi D., Khalack V., Kashko P., Kobzar O., Perron-Cormier M.* SPECTROSCOPIC AND PHOTOMETRIC INVESTIGATION OF CHEMICALLY PECULIAR STARS
8. *Yushchenko V., Gopka V., Yushchenko A., Jeong Y.* THE CHEMICAL COMPOSITION OF BARIUM STAR HD 204075
9. *Vasil'eva S., Yushchenko A., Gopka V., Kovtykh V., Jeong Y.* CHEMICAL COMPOSITION OF HV 834 - CEPHEID FROM SMALL MAGELLANIC CLOUD
10. *Usenko I.A., Kniazev A.Yu., Kovtyukh V.V., Miroshnichenko A.S., Mishenina T.V., Turner D.G.* SPECTROSCOPIC INVESTIGATIONS OF GALACTIC CLUSTERS WITH ASSOCIATED CEPHEID VARIABLES. III. COLLINDER 394 AND BB SGR.
11. *Andrych K.D., Andronov I.L.* MAVKA: STATISTICALLY OPTIMAL PHENOMENOLOGICAL APPROXIMATION OF SIGNALS IN NEAR-EXTREMAL INTERVALS
12. *Ponomarenko V.A., Simon A.O., Vasylenko V.V., Izvekova I.O., Baransky A.R.* RESULTS OF MONITORING OF FIVE ACTIVE GALACTIC NUCLEI IN OPTICAL RANGE
13. *Bannikova E.Yu., Akerman N.A., Sergeev A.V.* INTERPRETATION OF ALMA OBSERVATION OF DUSTY TORUS IN NGC1068

**Tuesday, 13.08.2019**

**14:30 – 16:10 Section session** (*Conference Room in “Chernomorka”, 2 floor*)

**Convener** – *I.L.Andronov*

14. *Kudashkina L.S.* RV TAU VARIABLES
15. *Doikov D.N.* FORMATION AND EVOLUTION OF DUST PARTICLES IN A FIELD OF HARD RADIATION
16. *Kolesnikov S.V.* POLARIMETRIC METHODS IN ASTROPHYSICS
17. *Kudzej I.* DATA ACQUISITION SYSTEM IMPLEMENTED IN THE ASTRONOMICAL OBSERVATORY ON KOLONICA SADDLE
18. *Breus V.V., Andronov I.L., Dubovsky P., Petrik K., Kolesnikov S.V.* PHOTOMETRIC MONITORING OF THE "KING OF INTERMEDIATE POLARS" FO Aqr
19. *Chinarova L.L., Andronov I.L.* SEMI-REGULAR VARIABLE STARS: LONG-TERM VARIATIONS OF THE CHARACTERISTICS OF PULSATIONS. RY UMa
20. *Andronov I.L., Breus V.V., Cook L.M., Cook D.A., Chinarova L.L., Dubovsky P., Kim Yong-gi, Mishevskiy N., Petrik K., Yoon Joh-Na.* UNUSUAL SUB-LOW AND SUPER-LOW STATES OF THE MAGNETIC DWARF NOVA DO DRA

## **POSTERS**

1. *Pankov N.E., Placinda S.I., Butkovskaya V.V., Shulyak D.* STARSPOT ACTIVITY OF COOL STAR 61 CYG A AND EVOLVED STAR  $\beta$  AQL
2. *Kalinina Yu.* GAIA ALERTS IN X-RAY AND RADIO RANGES
3. *Kuratova A.K., Miroshnichenko A.S., Zharikov S.V., Manset N., Khokhlov S.A., Raj A., Kusakin A.V., Reva I.V., Kokumbaeva R.I., Usenko I.A., Knyazev A.Y.* SPECTROSCOPIC MONITORING OF THE B[E] OBJECTS FS CMA AND MO CAM
4. *Dubovskiy V.V., Marsakova V.I., Andronov I.L.* PARAMETERS DETERMINATION OF TWO POORLY STUDIED ECLIPSING VARIABLE STARS: V1044 CAS AND V0779 CAS
5. *Gorbaneva T.I., Mishenina T.V.,* MOLYBDENUM AND RUTHENIUM ABUNDANCES IN GALACTIC DISC GIANTS
6. *Nazarenko V.V.* THE ON- AND OFF-STATE GENERATIONS IN THE CASE OF THE THICK ACCRETION DISK AND UNDEFINED PRECESSION PERIOD. 3-D NUMERICAL HYDRODYNAMICAL SIMULATIONS IN ACCRETION DISK IN MICROQUASAR CYG X-1.
7. *Pyatnytskyy M.Yu.* USING CONSUMER-GRADE DSLR AND SMALL TELESCOPE TO FIND NEW VARIABLE STARS

## SUBSECTION “ASTROINFORMATICS”

**Tuesday, 13.08.2019**

**16:30 – 18:10 Section session** (*Conference Room in “Chernomorka”, 2 floor*)

**Convener** – *I.B.Vavilova*

1. *Akhmetov V.S., Fedorov P.N., Khlamov S.V., Dmytrenko A.M., Khramtsov V.P.* ANALYSIS OF THE STELLAR PROPER MOTIONS OF GAIA DR2 AND PMA CATALOGUES
2. *Protsyuk Yu.I., Kovalchuk O.M., Andruk V.M.* COMPARISON OF THE RESULTS OF PROCESSING THE CCD OBSERVATIONS OF SELECTED CLUSTERS
3. *Andruk V., Eglitis I., Protsyuk Yu., Akhmetov V., Pakuliak L., Shatokhina S., Yizhakevych O.* PHOTOMETRY OF STARS FOR ASTRONEGATIVES WITH A SINGLE EXPOSURE
4. *Kashuba S., Kashuba V., Andruk V.* PHOTOMETRY OF STARS ON DIGITIZED PLATES OF THE COLLECTIONS OF THE ODESSA OBSERVATORY
5. *Shlyapnikov A.A., Bondar N.I., Gorbunov M.V., Gorbachev M.A., Ignatov V.K.* INVESTIGATION OF THE MAGNETIC ACTIVITY OF STARS OF RED DWARFS WITH THE DATABASES OF GROUND-BASED AND SPACE OBSERVATIONS
6. *Gorbunov M.V., Gorbachev M.A., Ignatov V.K., Logachev K.V., Shlyapnikov A.A.* INNOVATION AND VIRTUAL OBSERVATIONS: CRAVO DATABASE
7. *Vavilova I.B., Andruk V.M., Pakuliak L.K., Eglitis I., Yuldoshev Q.X., Mullo-Abdolov A.Sh., Shatokhina S.V., Yizhakevych O.M., Protsyuk Yu.I., Relke H., Akhmetov V.S., Muminov M.M., Ehgamberdiev Sh.A., Kokhirova G.I.* ON THE FON ASTRO-PLATE PROJECT

**Friday, 16.08.2019**

**14:30 – 16:10 Section session** (*Conference Room in “Chernomorka”, 1 floor*)

**Convener** – *Yu.I.Protsyuk*

8. *Maigurova N.V., Protsyuk Yu.I.* PROBABILITIES OF PHYSICAL LINK BETWEEN THE COMPONENTS OF THE SELECTED MULTIPLY SYSTEMS FROM WDS CATALOG
9. *Vlasenko V.P., Akhmetov V.S., Savanevych V.E., Briukhovetskyi A.B., Dikov E.N., Khlamov S.V.* CoLiTecSAT. MATCHED FILTER FOR EXTENDED IMAGES OF OBJECTS.
10. *Kolomiyets S.V., Voloshchuk Yu.I., Kundyukov S.G., Kyrychenko I.Yu., Kolomiyets K.A., Prymachov Yu.D.* INFORMATION TECHNOLOGIES AND DATABASES IN METEOR ASTRONOMY: THE 65TH ANNIVERSARY OF THE FIRST REGISTRATION OF RADIOMETEORS IN UKRAINE, WHAT'S NEXT?
11. *Shatokhina S., Kazantseva L., Andruk V.* THE RE-PROCESSING RESULTS OF PHOTOGRAPHIC OBSERVATIONS OF ASTEROIDS WITH GAIA CATALOG AT THE MAO NAS OF UKRAINE
12. *Vavilova I.B., Shatokhina S.V., Yizhakevych O.M., Kazantseva L.V., Protsyuk Yu.I., Pakuliak L.K., Eglitis I., Relke H., Yuldoshev Q.X., Mullo-Abdolov A.Sh., Andruk V.M.* ON THE SOLAR SYSTEM SMALL BODIES ASTROPLATE PROJECT OF THE UKRAINIAN VIRTUAL OBSERVATORY
13. *Ignatov V., Gorbachev M., Shlyapnikov A.* STARS WITH EXOPLANETS AND OBSERVATIONS OF THEIR TRANSITS AT CRAO

POSTER'S SHORT PRESENTATION AND DISCUSSION (collaborative projects, books)

### **POSTERS**

1. *Akhmetov V.S., Andruk V.M., Protsyuk Yu.I., Relke H., Eglitis I.* NEW ASTROMETRIC REDUCTION OF THE SUPERCOSMOS PLATE ARCHIVE: FIRST RESULTS
2. *Yuldoshev Q., Andruk V., Muminov M.* THE ATROMETRIC AND PHOTOMETRIC RESULTS OF DIGITIZED PLATES ON EPSON EXPRESSION 10000XL SCANNER WITH DIFFERENT RESOLUTIONS
3. *Eglitis I., Shatokhina S., Yizhakevych O., Protsyuk Yu., Andruk V.* ASTEROID SEARCH RESULTS FOR DIGITIZED ASTROPLATES OF 1.2M TELESCOPE IN BALDONE
4. *Mullo-Abdolov A., Protsyuk Yu., Akhmetov V., Relke H., Yuldoshev Q., Kokhirova G., Andruk V.* COMPARISON OF ASTROMETRIC REDUCTION'S RESULTS IN THE PROJECT “FON-DUSHANBE CATALOGUE”

# RADIOASTRONOMY

**Wednesday, 14.08.2019**

**14:30 – 16:10 Section session** (*Conference Room in “Chernomorka”, 2 floor*)

**Convener** – *I.Shmeld*

1. *Aberfelds A., Shmeld I.* TWO YEARS RESULTS OF METHANOL MASER MONITORING BY IRBENE RADIOTELESCOPES
2. *Miroshnichenko A.* ENVIRONMENT OF SOURCES WITH GIANT RADIO STRUCTURES
3. *Ulyanov O.M., Shevtsova A.I., Skoryk A.O.* BROADBAND PROBING OF THE UPPER MAGNETOSPHERES OF PULSARS
4. *Shepelev V.A., Konovalenko A.A., Lytvynenko O.A., Isaeva E.A., Vashchishin R.V.* BROADBAND INTERFEROMETRIC OBSERVATIONS AT DECAMETER WAVELENGTHS
5. *Tsvyk N.* JOVIAN DECAMETER RADIO EMISSION: TO THE QUESTION ON THE SIZE OF SOURCES
6. *Vasilenko N., Sidorchuk M.A.* UTR-2 LOW FREQUENCY NORTHERN SKY CONTINUUM SURVEY. Part II.

**16:10 – 16:30 Coffee break**

**16:30 – 18:10 Section session** (*Conference Room in “Chernomorka”, 2 floor*)

**Convener** – *O.M.Ulyanov*

7. *Shmeld I.* MOLECULES IN SPACE AS SEEN FROM VENTSPILS
8. *Bezrukovs V., Steinbergs Ja., Shemlds I., Skirmante K., Aberfelds A., Bleiders M., Orbidans A.* GALACTIC MASER OBSERVATIONS IN VLBI MODE IN VENTSPILS
9. *Sukharev A.* STUDY OF VARIABILITY 3C 144 (TAURUS A) RADIO SOURCE AT FREQUENCIES 1.6, 5, 6.1 GHZ WITH PASSAGE THROUGH THE SOLAR SUPERCORONA
10. *Sukharev A., Ryabov M., Bezrukovs V., Orbidans A., Bleiders M., Udovichenko S., Keir L., Eglitis I., Dubovsky P.* INVESTIGATION FAST VARIABILITY PROPERTIES OF EXTRA-GALACTIC RADIO SOURCES OJ 287 AND 3C 273 IN RADIO AND OPTICAL BANDS
11. *Gorbunov A., Ryabov M.I.* THE NATURE OF FREQUENCY DEPENDENCE OF THE SECULAR DECREASE FLUX OF RADIO EMISSION OF CASSIOPEIA A.
12. *Sobitnyak L.I., Ryabov M.I.* EFFECTS OF LUNAR TIDAL WAVE PASSAGE IN THE TOP EARTH'S ATMOSPHERE ACCORDING TO MONITORING OF FLUXES OF POWERFUL RADIATION SOURCES ON «URAN-4»

## Thursday, 15.08.2019

**14:30 – 16:10 Section session** (Conference Room in “Chernomorka”, 1 floor)

**Convener** – *O.A.Lytvynenko*

13. *Ulyanov O.M., Reznichenko O.M., Zakharenko V.V., Antyufeyev A.V., Korolev A.M., Patoka O.M., Prisiazhnii V.I., Poichalo A.V., Voityuk V.V., Mamarev V.N., Ozhinskii V.V., Vlasenko V.P., Cmil V.M., Lebed V.I., Palamar M.I., Chaikovskii A.V., Pasternak Yu.V., Strembitskii M.A., Natarov M.P., Steshenko S.O., Glamazdyn V.V., Shubny A.S., Kirilenko A.A., Kulik D.Y., Konovalenko A.A., Lytvynenko L.M., Yatskiv Ya.S.* CREATING THE RT-32 RADIO TELESCOPE ON THE BASIC OF MARK-4B ANTENNA SYSTEM. MODERNIZATION PROJECT AND FIRST RESULTS.
14. *Antyufeyev O., Bleiders M., Patoka O., Bezrukovs V., Aberfelds A., Smelds I., Orbidans A., Steinbergs J., Shulga V.* CALIBRATION FEATURES AT THE RADIO TELESCOPES AT IRBENE, LATVIA
15. *Bleiders M.* SPECTRAL LINE REGISTRATION BACK-END BASED ON USRP X300 SOFTWARE DEFINED RADIO
16. *Orbidans A., Bezrukovs V., Aberfelds A.* CURRENT DEVELOPMENTS FOR AUTOMATION OF RADIO ASTRONOMICAL OBSERVATIONS AT IRBENE OBSERVATORY
17. *Prysiashnyi V.I., Ozhinskyi V.V., Vlasenko V.P., Kutovyi O.M.* RESULTS OF ANTENNA SYSTEM “MARK-4B” MODERNIZATION AND PERSPECTIVES OF RADIO TELESCOPE “RT-32” CREATION

**16:10 – 16:30 Coffee break**

**16:30 – 18:10 Section session** (Conference Room in “Chernomorka”, 1 floor)

**Convener** – *V.Bezrukovs*

18. *Lytvynenko O.A., Derevyagin V.G.* COMPARISON OF IONOSPHERIC IRREGULARITIES RADIOASTRONOMY MONITORING DATA AND IN SITU MEASUREMENTS ONBOARD SPACECRAFTS
19. *Marenkov V.I.* THE INFLUENCE OF POLARIZATION ON THE AMPLITUDE-FREQUENCY FUNCTION OF THE BREMSSTRAHLUNG OF HETEROGENEOUS PLASMA
20. *Orlov V.V., Lytvynenko O.A., Galanin V.V.* OPTIMIZATION OF BROADBAND RADIO INTERFEROMETR

## **POSTERS**

1. *Podgorny G.S.* DECAMETER INTERFERENCE RADIO INTERFEROMETRY, METHODS OF FIGHTING
2. *Podgorny G.S., Shepelev V.A.* METHODS OF RFI MITIGATION USED AT THE URAN INTERFEROMETERS
3. *Panishko S.K., Lytvynenko O.A.* FREQUENCY DEPENDENCE OF THE IONOSPHERE SCINTILLATION PARAMETERS ON THE OBSERVATIONS OF THE COSMIC RADIO SOURCES AT THE DECAMETER WAVE RANGE
4. *Drozdov S.* DUST TEMPERATURE IN HOT GAS.
5. *Galanin V.V., Orlov V.V., Derevyagin V.G.* DEVICE FOR WORK WITH SMALL ANTENNA ARRAYS
6. *Isaeva E.A.* FADING OF THE CONTINUUM OF NOISE STORMS RELATED TO CME

# SUN, SOLAR ACTIVITY, SOLAR-TERRESTRIAL RELATIONS AND ASTROBIOLOGY

**Friday, 16.08.2019**

**14:30 – 16:10 Section session** (*Conference Room in “Chernomorka”, 2 floor*)

**Conveners** – *M.I.Ryabov*

1. *Miroshnichenko L.* SOLAR COSMIC RAYS: ACTUAL ASTROPHYSICAL AND APPLIED PROBLEMS
2. *Lozitsky V.G., Baranovsky E.A., Lozitska N.I., Tarashchuk V.P.* EVIDENCES FOR STRONG MIXED-POLARITY MAGNETIC FIELDS IN AREA OF A SEISMIC SOURCE ASSOCIATED WITH LARGE PROTON SOLAR FLARE
3. *Kirov B., Georgieva K.* ON THE POSSIBILITY TO PREDICT THE NEXT SUNSPOT MAXIMUM
4. *Efimenko V.* FEATURES OF THE EMERGENCE OF POWERFUL COMPLEXES OF ACTIVITY IN 12-24 SOLAR CYCLES
5. *Chornogor S.N., Kondrashova N.N.* MULTI-WAVELENGTH OBSERVATIONS OF A LARGE SOLAR FLARE
6. *Isaeva E.* APPROXIMATION OF THE INTEGRAL ENERGY SPECTRUM OF PROTONS OF SCR IN A RANGE OF >1-850 MEV

**16:10 – 16:30 Coffee break**

**16:30 – 18:10 Section session** (*Conference Room in “Chernomorka”, 2 floor*)

**Convener** – *V.M.Efimenko*

7. *Koval'chuk M.M., Baran O.A., Stodilka M.I., Hirnyak M.B., Laushnyk I.P.* INFLUENCE OF THE ASYMMETRY OF THE SOLAR MAGNETIC FIELD POLARITY REVERSAL ON THE GEOMAGNETIC ACTIVITY
8. *Orlyuk M.I., Ishchenko M.V., Onyshchuk I.I.* ANALYSIS OF THE EARTH'S SURFACE DEFORMATION ACCORDING TO THE GLOBAL NAVIGATION SATELLITE SYSTEMS DATA WITH ITS NEWEST MOVEMENTS IN THE TERRITORY OF UKRAINE
9. *Pasechnik M.N.* SOLAR PLASMA DYNAMICS DURING THE FORMATION AND DEVELOPMENT OF ELLERMAN BOMB PAIR
10. *Ryabov M.I., Sukharev A.L., Sobitnyak L.I., Komendant V.G.* PERIODS OF MAJOR INDICES OF SPACE WEATHER
11. *Sidorenkov N.S.* PEREGEE-SYZYGY TIDES IN ATMOSPHERE
12. *Adarma N.* L'INFLUENCE DE LACTOBACILLUS PLANTARUM A L'AGENT CAUSATIF DE FUSARIOSE DU PIN

## POSTERS

1. *Sobitnyak L.I., Ryabov M.I., Sukharev A.L., Orlyuk M.I.* THE CATALOG OF MAGNETIC STORMS AND OBSERVED DATAS OF VARIATIONS OF THE GEOMAGNETIC FIELD IN A ZONE OF THE ODESSA MAGNETIC ANOMALY
2. *Komendant V.G., Ryabov M.I., Koshkin N.I.* ABOUT THE PERIODS OF ANOMALOUS DRAG OF THE SATELLITE IN CONDITIONS OF HIGH SOLAR AND GEOMAGNETIC ACTIVITY
3. *Isaeva E.* RELATIONSHIP OF THE PROTON FLUX INTENSITY WITH RELATIVE DISTANCE BETWEEN HARMONICS OF TYPE II RADIO BURSTS
4. *Koleva K., Dechev M., Duchlev P., Miteva R.* HIERARCHICAL RELATIONS BETWEEN ERUPTIVE PROMINENCE PROPERTIES, FLARE EVOLUTION AND CME KINEMATICS IN LARGE SOLAR ENERGETIC PARTICLE EVENTS
5. *Steklov E.A., Vidmachenko A.P., Steklov A.F.* THE WATER RESOURCE OF THE MOON IS SUFFICIENT FOR ITS COLONIZATION
6. *Steklov E.A., Vidmachenko A.P., Steklov A.F.* WATER IN ASTEROIDS
7. *Vidmachenko A.P.* ON THE ORIGINAL THEORY OF THE APPEARANCE OF BIOLOGICAL MOLECULES IN ASTEROIDS
8. *Vidmachenko A.P.* TRACES OF LIFE ON MARS SHOULD BE SOUGHT IN EMISSIONS FROM CRATER HELLAS IN PLACES, WHERE WATER EXITS FROM UNDER THE SURFACE
9. *Gromozova E.N., Kachur T.L., Bukalov A.V.* EFFECT OF ALUMINUM SHIELDS IN THE METACHROMATIC REACTION (BIO-ASTRONOMICAL EFFECT OF CHIZHEVSKY-VELKHOVER)

# SOLAR SYSTEM AND SPACE ENVIRONMENT

**Wednesday, 14.08.2019**

**14:30 – 16:10 Section session** (*Conference Room in “Chernomorka”, 1 floor*)

**Convener** – *N.I.Koshkin*

1. *Baransky A.* ASTROMETRIC AND PHOTOMETRIC OBSERVATIONS OF COMETS AND ASTEROIDS AT THE KYIV COMET STATION (MPC 585) DURING 2006-2018
2. *Eglitis I., Minders V.* INVESTIGATION OF NEO ASTEROIDS 2006 VB14 AND 1986 DA
3. *Slyusarev Ivan, Hromakina T., Kaydash V., Mashtakova Yu., Belskaya I., Shkuratov Yu.* APPLICATION OF THE PHASE RATIO METHOD FOR THE IDENTIFICATION OF AREAS ON THE CERES SURFACE WITH ANOMALOUS ROUGHNESS USING DAWN FRAMING CAMERA IMAGES
4. *Slyusarev I., Glezina D., Belskaya I.* FAMILIES WITHIN JUPITER TROJANS AND THEIR CONTRIBUTION TO THE OVERALL CHARACTERISTICS OF THE SWARMS
5. *Luk'yanyk Igor, Zubko E., Husárik M., Ivanova O., Svoren J., Kochergin A., Baransky A., Videen G.* SIGNIFICANT AND FAST VARIATIONS OF DUST COLOR IN COMET 41P/TUTTLE-GIACOBINI-KRESÁK
6. *Velichko Sergey, Korokhin V., Kaydash V., Shkuratov Yu.* REMOVAL OF TOPOGRAPHY EFFECT FROM PHOTOMETRIC LROC NAC DATA USING METHODS OF SPACE CARTOGRAPHY

**16:10 – 16:30 Coffee break**

**16:30 – 18:10 Section session** (*Conference Room in “Chernomorka”, 1 floor*)

**Convener** – *I.V.Luk'yanyk*

7. *Troianskyi Volodymyr.* ROTATION PERIODS OF V-TYPE ASTEROIDS OUTSIDE THE VESTA FAMILY
8. *Ponomarenko Vasyl, Churyumov K.* SPECTROPHOTOMETRIC RESEARCH OF COMET 46P/WIRTANEN IN OPTICAL RANGE
9. *Kozhukhov Oleksandr, Rishchenko S., Dementiev T., Pasatetskiy V., Bezluschenko T., Tanasiychuk Y.* NEO OBSERVATIONS IN CSIRP AND NFC
10. *Tiron Stefan D.* A STRUVE GEODETIC POINT FROM MOLDOVA – ON THE UNESCO WORLD HERITAGE LIST
11. *Kleshchonok V.V., Karbovsky V.L., Buromsky N.I., Lasko M.V.* OBSERVATIONS OF STAR OCCULTATIONS BY SMALL BODIES OF THE SOLAR SYSTEM IN KYIV
12. *Hromakina Tetiana, Velichko S., Belskaya I., Krugly Yu., Sergeev A.* PHOTOMETRY OF AN UNUSUAL SMALL SOLAR SYSTEM OBJECTS 2016 ND21
13. *Lukina Oleksandra, Baransky A.* ASTROMETRIC AND PHOTOMETRIC OBSERVATIONS OF SIX TRANSNEPTUNIAN OBJECTS AT KYIV COMET STATION
14. *Gorbaney Yuri, Podlesnyak S., Kimakovskiy S., Andruk V.* USING A SCHMIDT TELESCOPE TO OBSERVE METEORS, COMETS AND ASTEROIDS

**Thursday, 15.08.2019**

**14:30 – 16:10 Section session** (*Conference Room in “Chernomorka”, 2 floor*)

**Convener** – *M.P.Kaliuzhnyi*

15. *Zotov Leonid, Bizouard Ch., Sidorenkov N.* CHANDLER WOBBLE VARIABILITY
16. *Kulichenko Mykola, Shulga O.* RESULTS OF POSITIONAL AND PHOTOMETRIC MEASUREMENTS OF METEOR TRAJECTORIES OBSERVED IN MYKOLAIV 2017-2018
17. *Yepishev Vitaly, Motrunich I., Noybauer I., Perig V., Kudak V., Kozhukhov D.* LONG-PERIOD CHANGES IN THE PROPER ROTATION OF NEAR-POLE SPACE OBJECTS, THEIR CAUSES
18. *Yepishev Vitaly, Motrunich I., Noybauer I., Perig V., Kudak V., Priszny V., Kozhukhov D., Kozhukhov O., Mamaev V.* BASICS OF IDENTIFICATION PROCESS IN CASE OF SPACECRAFT WITHOUT CONNECTION

19. *Horbachova Alice, Bazyey O.* SOME FEATURES OF THE SIMULATION OF THE EVOLUTION OF SPACE DEBRIS
20. *Kozhukhov Oleksandr, Rishchenko S., Dementiev T., Koshkin N., Strakhova S., Piskun O., Iluchok O., Kozhukhov D., Kuchuk Y.* OBSERVABILITY OF LEO OBJECTS BY OPTICAL SENSORS – A GEOGRAPHIC ASPECT

**16:10 – 16:30** *Coffee break*

**16:30 – 18:10** **Section session** (*Conference Room in “Chernomorka”, 2 floor*)

**Convener** – *V.P.Epishhev*

21. *Shakun Leonid, Korobeynikova E., Koshkin N., Kozhukhov O., Kozhukhov D., Piskun O., Strakhova S.* ANALYSIS OF NEAR-EARTH RESIDENT SPACE OBJECTS VISIBILITY CONDITIONS FROM OPTICAL GROUND STATIONS
22. *Kriuchkovskiy Vitalii, Bushuev F., Kaliuzhnyi M., Khalaley M., Kulichenko M., Shulga O.* FIRST RESULTS OF CLARIFYING OF ORBITAL ELEMENTS OF LOW-ORBIT SPACECRAFTS USING OBSERVATIONS OF THE RI "MAO" DOPPLER STATION
23. *Melikyants Seda, Korobeinikova E., Strakhova S., Romanyuk Ya., Terpan S.* SIMULATION OF THE ORBITING SPACECRAFT TO UNDERSTAND THEIR ROTATION BASED ON PHOTOMETRY
24. *Kleshchonok V.V., Kaminsky S.V., Karbovsky V.L., Buromsky N.I.* GPS SYSTEM OF ACCURATE TIME FOR TV OBSERVATIONS
25. *Kaliuzhnyi Mykola, Zhang Z., Bushuev F., Shulga O., Bezrukovs V., Reznichenko O., Melnychuk S., Malynovskyi Y.* ONGOING OPERATION AND PERSPECTIVES OF SIMPLE VLBI NETWORKS OF GEOSTATIONARY SATELLITES MONITORING
26. *Tevjashev A., Shostko I., Neofitnyi M., Kolomiyets S., Kyrychenko L., Prymachov Yu.* MATHEMATICAL MODEL AND METHOD OF OPTIMAL PLACEMENT OF OPTO-ELECTRONIC SYSTEMS FOR TRAJECTORY MEASUREMENTS OF AIR OBJECTS AT TEST SITES
27. *Kablak N.I.* MONITORING OF EARTH'S ATMOSPHERE BASED ON OPERATIVE PROCESSING GNSS DATA IN UA-EUPOS/ZAKPOS NETWORK OF ACTIVE REFERENCE STATIONS

## POSTERS

1. *Kozak Pavlo.* DIFFUSE-NEBULA COMA OF SOME METEORS: OBSERVATIONAL FACTS AND POSSIBLE EXPLANATION
2. *Golubaev O., Mozgova A.* OBSERVATIONAL COMPLEX FOR OBTAINING THE KINEMATIC AND PHYSICAL CHARACTERISTICS OF METEOR BODIES AND DETERMINATION THEIR CHEMICAL COMPOSITION
3. *Reshetnyk Volodymyr, Skorov Yu., Andrienko Yu.* ACCELERATION OF HIERARCHICAL DUST AGGLOMERATES NEAR COMET 67P/CHURYUMOV-GERASIMENKO
4. *Kuznyetsova Yuliana, Vidmachenko A., Steklov A.* WHAT CAN BE CALLED “TRACES” OF LIFE ON MARS
5. *Vidmachenko A., Kuznyetsova Yu.* POSSIBLE LIFE FORMS ON THE “YOUNG” EARTH AND MARS
6. *Steklov A., Vidmachenko A., Miniaylo D.* WAYS OF HUMAN SURVIVAL ON THE MOON
7. *Shliakhetska Yana, Vidmachenko A.* SEASONAL CHANGES IN JUPITER'S ATMOSPHERE RESTORED THEIR PERIODICITY
8. *Vidmachenko A., Shliakhetska Ya.* ABOUT SEVERAL WAYS TO RECOGNIZE BIOSIGNATURES OF METABOLIC ACTIVITY OF MARS
9. *Steklov Alexei, Vidmachenko A., Miniaylo D.* METHODS OF HEATING AREAS WHERE A PERSON LIVES BELOW THE SURFACE OF THE MOON
10. *Zhilyaev B.E., Steklov A.F., Vidmachenko A.P.* OBSERVATIONS OF BOLIDES IN THE SKY OVER KIEV
11. *Nevodovskyi P., Vidmachenko A., Morozhenko O.* USING OF ULTRAVIOLET POLARIMETRY IN THE STUDY OF EARTH'S UPPER ATMOSPHERE
12. *Manchenko Liliia D.* GRAVITATIONAL EFFECTS IN SATURN'S RINGS: POSSIBLE PHYSICAL MODEL