

UNIVERSAT-2006

SCIENTIFIC PROGRAMM

June 26, 2006, Monday

10:00–13:00 Registration

13:00–15:00 Lunch

15:00–16:30 Opening Ceremony and Invited Reports

INVITED REPORTS (30 min)

15:20–15:50 Haubold, H.J., The United Nations Basic Space Science Initiative

15:50–16:20 Krasotkin S.A., Panasyuk M.I., Radchenko V.V., Space research scientific and educational project of Moscow State University

17:00–21:00 Ice-Breaking Party (Boat Excursion)

June 27, 2006, Tuesday

Section I. Space Researches in University Education – near-Earth Space Environment and Geophysics

Co-Chairs - Chilingarian A.A., Panasyuk M.I.

Oral reports

10:00-10:40 Chen J.Y.S. NSPO's microsatellite program (invited)

10:40-11:00 L de Botton, EXPRESSO: a CNES student call for ideas in the field of orbital system and stratospheric balloons

11:00-11:20 Burke J.D., Zhdanovich O. Progress in Lunar Educational Initiatives

11:20-12:00 Coffee-break and Poster Session

12:00-12:20 Chilingarian A.A., Particle detectors networks for the Fundamental Physics, Space Weather and Education

12:20-12:40 Chakrabarti S., The Role of Sounding Rocket Experiments in Space Science and Technology Education at Boston University

12:40-13:00 Garipov G.K., Panasyuk M.I., Tulupov V.I., Khrenov B.A., Shirokov A.V., Yashin I.V., Ultraviolet Radiation Detector of the MSU Research Educational Microsatellite "Universitetskiy-Tatyana"

13:00-13:20 Klimov S.I., Zelenyi L.M., Rodin V.G., Project of the Russian Academy of Sciences - "Chibis". Micro-satellite platform for applied-scientific studies

Poster reports

1. Bhaskar, Sonu, A novel approach of satellite tracking of endangered species

2. Ivanova T.A., Nymmik R.A., Pavlov N.N., Reizman S.Ya., Rubinstein I.A., Soukhanov A.V., Vedenkin N.N., Vlasova N.A., Energy spectra of solar proton fluxes using data from the "Universitetskiy/Tatyana" supersmall satellite
3. Khrenov B.A., Transient UV flashes in the night atmosphere
4. Klimov P.A., Night atmosphere UV radiation as measured by the UV detector on board the "Universitetskiy-Tatyana" satellite
5. Myagkova I.N., Kuznetsov S.N., Muravieva E.A., Electron outer belt dynamics during April-May 2005 – "Coronas-F" and "Universitetskiy" satellites data
6. Nikolaeva N.I., Kuznetsov S.N., Kuznetsov N.V., Trapped proton fluxes observed on Coronas-I,F satellites during the solar minimum
7. Smolin S.V., Model of proton spatial-energetic distribution in the Earth's radiation belts
8. Veselovsky I.S., Yakovchouk O.S., Dual micro-spacecraft configuration as a tool for the geomagnetic storm forecasts
9. Vicente-Vivas E., Millán A.E., "Satellite Activities in Mexico and Latin America"
10. Zaitsev A.N., The current position and the prospects of the amateur radio satellites proposals
11. Zhukov A.N., Berghmans D., Hochedez J.-F., SWAP and LYRA Instruments onboard PROBA2 Microsatellite

13:30–15:00 Lunch

Section II.Space Researches in University Education – Heliobiology, Ecology, Atmosphere Sciences, Remote Sensing

Co-Chairs - Skarjatin V.D., Kravtsova V.I.

Oral reports

- 15:00-15:40 Kravtsova V.I., A series of atlases on methods of space images interpretation as a new tool for remote sensing education in Earth sciences (invited)
- 15:40-16:00 Antsiferov A., Makarova M., Nikitin M., Skarjatin V., Space methods in education of ecologists
- 16:00-16:20 Knizhnikov Yu.F., Kharkovets E.G., Baldina E.A., The computer-based practical stereo measurements training course in the aerospace education for the students of geographical specialities

16:20-17:00 Coffee-break and Poster Session

- 17:00-17:20 Chalova E.R., Moscow University, Vorobjevy Gory: an aerospace atlas for school students
- 17:20-17:40 Ogurtsov S.V., Dobrynin D.V., Masterov V.B., Poyarkov N.D., Satellite telemetry and remote sensing techniques in ecological and zoological education
- 17:40-18:00 Zinchuk N.N., Knizhnikov Yu.F., Kharkovets E.G., Anaglyph stereo presentation is a new form of aerospace education

Poster reports

1. Baldina E.A., Chalova E.R., Tutubalina O.V., Internet seminars as a new way of Inter-University Aerospace Center activity

2. Bhaskar, Sonu, Bioengineering in aerospace applications: A study on Aerospace medicines
3. Chalova E.R., Aerospace images in school education
4. Dmitriev A.V., Ionospheric effects of the solar radiation

June 28, 2006, Wednesday

Section III. Space Technology Education: Design, Development and Management of University Satellites

Co-Chairs - Mayorova V.I., Belokonov I.V.

Oral reports

10:00-10:40 Mayorova V.I., Use of microsatellite technology in aerospace education by the example of BAUMANETS microsatellite project (invited)

10:40-11:00 Muravyev V.V., GlobalStar experiment on board BAUMANETS spacecraft

11:00-11:20 Karandaev A.A., Karpenko S.O., Muravyev V.V., Design and implementation of BAUMANETS microsatellite

11:20-12:00 Coffee-break and Poster Session

12:00-12:20 Belokonov I.V., The project of the scientific - educational small satellite for research of Earth upper atmosphere density

12:20-12:40 Korepanov V.E., Lizunov G.V., Kozak L.V., The first Ukrainian nanosatellite - main goals and complex of scientific instruments

12:40-13:00 Kozlov A.V., Golovan A.A., Vavilova N.B., Demidov O.V., Panev A.A., An overview of Practical Training for Students in Simulated Satellite Navigation and Attitude Determination for "Universitetskiy-Tatyana" Satellite

Poster reports

1. Baryshev E.Yu., Voronov K.E., Semkin N.D., Module "Dust" of equipment "Chistota" on research dust vicinity of the "Photon-M" spacecraft
2. Belokonov I.V., Kramlih A.V., Soboda S.A., Stukov I.S., Yakunin A.V., Usage of state-of-the-art information technologies for tracking scientific - educational projects
3. Bogdanov O.N., Accurate Satellite Trajectory Determination Using IGS Precise Ephemeris
4. Bolotin Yu.V., Golovan A.A., Vavilova N.B., An Overview of Practical GPS Navigation for Students
5. Demidov O.V., Simulation of Code and Doppler GPS & GLONASS Observables and Feasible Positioning Algorithms for the "Universitetskiy-Tatyana" Satellite
6. Kozlov A.V., Simulation of Carrier Phase GPS Observable Parameters and Feasible Altitude Determination Algorithms for the "Universitetskiy-Tatyana" Satellite
7. Kuzmina Yu.V., Khalturin S.V., Tracking programs for ground stations
8. Mehnen L., SSETI, the Student Space Exploration and Technology Initiative
9. Petrunin S.A., Voronov K.E., Semkin N.D., System of charge measurement of the FORON-M2 spacecraft
10. Shakhparonov V.M., Modelling of microelectromechanical instruments for nanosatellites

13:00 – 15:00 Lunch

*15:00–18:00 Visit to SINP Space Physics Practice Laboratory and Mission Control Center
OR Moscow Sightseeing*

19:00 Conference Dinner

June 29, 2006, Thursday

Section IV. Basic Space Sciences in High-School and Cooperation in Space Education
Projects

Co-Chairs - N.B. Crosby, V.V. Radchenko

Oral reports

11:00-11:40 Crosby N.B., Coupling of Atmospheric Layers EU FP5 RTN Project:
Engaging Scientists in Training and Outreach Activities (invited)

11:40-12:00 Stancato, F., Mangili Jr, J. F., Tribess, A., Prodsan, Y, 14 Bissat, an
International Student Experience

12:00-12:20 Zhuravlev V.M., Space Physics Practice at Ulyanovsk State University

12:20-13:00 Coffee-break and Poster Session

13:00-13:20 Belokonov I.V., Ishkov S.A., Shakhov V.G., Shustov S.A., Timbai I.A.,
Zabolotnov Yu.M., Summer space schools as an effective form of operation
within the frames of international educational space projects

13:20-13:40 Turzyniecki K., Kukowski J., Olechowski A., Krasotkin S.A., Teaching about
the outer space in the Polish college.

13:40-14:00 Zaitsev A.N., The educational program of the youth center "Space
communications and informatics"

14:00-14:20 Knizhnikov Yu.F., Kravtsova V.I., Interuniversity aerospace center –
collaboration of NIS Universities

14:20-15:20 Coffee-break and Poster Session

15:20-17:00 Open discussion and closing ceremony

Poster reports

1. Avagyan K., Arakelyan K., Avetisyan A., Chilingarian A., Chilingarian S., Danielyan V., Reymers A., Yeghikyan A., Tserunyan S., Simple particle detector for educational purposes
2. Garipov G.K., Klimov P.A., Moiseev B.M., Myagkova I.N., About the remote cooperation in the field of space-physics education
3. Kalegaev V.V., Bobrovnikov S.Yu., Data Services for SINP MSU Space Experiments
4. Klimov S.I., Grigoryan O.R., Tamkovich G.M., Novikov D.I., Basic scientific results of the first scientific-educational micro-satellite "Kolibri -2000"
5. Kononovich E.V., Smirnova O.B., Matveychuk T.V., Jakunina G.V., Krasotkin S.A., Life of the Earth in the Solar Atmosphere (multimedia manual)
6. Kukowski J., The role of reference frames in the analysis of physical problems.
7. Turzyniecki K., The 19th century observation of light phenomena versus space-time continuum.

8. Tutubalina O.V., Aerospace and remote sensing education in the Geography schools of Moscow and Cambridge universities
9. Zhuravlev A.V., Fundaev S.V., Estimation of the amplitude of the second zonal harmonic of the Earth's gravitational field basing on the data of secular and long-periodic variations of the satellite's orbital parameters
10. Zhuravlev V.M., Ignat'ev V.V., Garanin Yu.V., Dzyuba A.N., Tyutyunnikov D.G., Krasotkin S.A., Radchenko V.V., The computer methods of the sunspot evaluation investigation basing on the data from SOHO spacecraft
11. Zhuravlev V.M., Fundaev S.V., Shlyapin V.A., Zhuravlev A.V., The investigation of the wave processes in the Earth's magnetosphere by using the satellite antenna array of variable configuration
12. Zhuravlev V.M., Kornilov D.A., Vorotilin D.V., Dmitrieva A.G., Orishchenko A.V., Investigation of the Earth's magnetosphere structure using the magnetometers onboard the spacecrafts
13. Zhuravlev V.M., Shlyapin V.A., Sigaeva E.A., Radchenko V.V., Estimation of the atmosphere's density basing on the variation of the focal parameters of the spacecraft's orbit
14. Zhuravlev V.M., Shlyapin V.A., Zhuravlev A.V., The investigation of the connections between the data of the different charged-particles detectors onboard the "Coronas-F" and "Universitetskiy" satellites
15. Zhuravlev V.M., Zhuravlev A.V., Shlyapin V.A., Myagkova I.N., Estimation and comparing of the position of the outer radiation belt maximum at the altitudes of 1000 and 500 km basing on the "Universitetskiy" and "Coronas-F" satellites data

June 30, 2006, Friday

Excursion to Korolev Mission Control Center