

Future Space Technologies and Experiments in Space

Russian-European Summer Space School

Aims of the school

The overall objective of the School is to involve young people in the development and implementation of experiments in space, with a view of obtaining new fundamental knowledge and applied technologies.

During the School young people will be able to share ideas and results, listen to lectures of leading scientists and experts in the field of space engineering, work on joint projects.

Main fields of the School Program in 2003:

- Microgravitational space platforms (MSP) of "Foton-M"/"Bion-M" type: performances and capabilities;
- The project of the European Space Agency "The Second Young Engineers' Satellite" (YES2);
- The program of space experiments in Samara State Aerospace University on MSP "Foton-M" N2.

The School Program will include

Lectures

- On the general issues of organization and implementation of experiments in space on "Foton-M"/"Bion-M";
- On evaluation of disturbing factors in the space environment on reliability and efficiency of experiments and spacecrafts;
- On development prospects of the Russian rocket & spacecraft engineering.

Presentations

- Long-range project of the sensor satellite for research of space debris (monitoring of pollution of low-earth orbits by small-sized particles of natural and artificial origin);
- Project YES2: present-day condition and prospects;
- Programs of space experiments in SSAU.

Seminars and practical classes in SSAU laboratories to develop YES2 project on:

- Dynamics of the tether system from the point of view of spacecraft safety;

- Use of the ground segment for control of YES2, control and navigation in YES2;
- Dynamics of unguided motion and dispersion of trajectories for capsules with inflatable elements;
- Aerothermodynamics of capsules with inflatable elements;
- Additional experiments within the framework of YES2 project;
- Possibilities of YES2 project on MSP "Foton-M".

Mini-conferences for YES2 project participants

- At the beginning of school, the conference will familiarize the participants with the present state of the project;
- At the end of school, the conference will summarize the work done and discuss plans for the future.

Visit to the space-rocket center;

The social events (museums, theatre, sightseeing, Volga boat trip).

Leading Russian scientists and experts are invited to take part in the School (SSAU professors, experts of space-rocket center), participation of some European experts is expected.

Calendar of Events

- May, 26 - opening the site, distribution of information
- May, 30 - deadline for registration of the school participants and hotel booking
- June, 9 - School Program starts
- June, 29 - arrival of participants
- June, 30 - July, 11 - School activities
- July, 12 - departure of participants

Financial conditions of participation in the School

- The payment for the Russian participants (excluding room and travel expenses) is provided by grants and support of Administration of the Samara Region and sponsors;
- The payment for the foreign is 95 euros for each working day, it includes room and meals (breakfast, lunch) expenses and participation in all scheduled School activities.

<http://volgaspace.ru/school>

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June, 30 - July, 11 2003 - Samara, Russia

Name & First Name
Organization:
Address
Postal code, City Country Fax
Telephone E-mail:
I intent ☐ To participate in the School
☐ Please inform me on future events in this field
My main interests are:
The following people could be interested in the School: