Joint European and National Astronomical Meeting

JENAM·2000

May 29 - June 3, 2000

Moscow, Russia

523.8
J41

European Astronomy at the Turn of the Millennium

ABSTRACTS

on micro, macro, and mega levels; 2) demonstration of the universal character of the lows of Nature and their validity for the extremity of objects from elementary particles to the galaxies; 3) demonstration of the circulation of basic natural elements (such as water, oxygen, nitrogen, carbon etc.) over the Earth; 4) acknowledge of the transformation of energy in the world; 5) discussion about cosmogonical problems of the Solar System origin, exclusiveness of the terrestrial conditions for the origin and development of the life; 6) conception of the star and world evolution. 7) conception of the evolution of the stars and the Universe.

THE PRE-UNIVERSITY ASTRONOMICAL EDUCATION IN POLAND

Flin P.
Submitted by: Flin Piotr (sfflin@cyf-kr.edu.pl)

Following the new educational scheme in Polish schools I present it main features, as well as educational purposes and the assumptions of the programme. On the basis of particular programmes, accepted by the Ministry of National Education, I discuss the astronomical contents of these programmes.

ORGANIZATION OF SEARCH COGNITIVE ACTIVITY IN ASTRONOMY LESSONS

Galkina T.A.
Submitted by: Galkina Tatiana Aleksandrovna (gomulina@orc.ru)

Elaboration lessons with problem solving are offered. During the lesson the teacher create that conditions that cause such pupils activity in consequence of which they have to learn. The lessons are based on the group form of work. The pupils are put in such situations that makes them look for the decisions and joint search and spirit of competition make this searching emotionally attractive. For example, instead of introduction lesson of practical astronomy the teacher offers to make up a guidebook on starry sky with instruction of favourable time of observation. Gaining the information by themselves pupils master knowledge as well as ability to work with mobile map just during the first lesson. Instead of bored tasks of calculation of luminary height children examine conditions of luminary visibility in different countries. The result of studies is graphically displayed by means of schemes and gives pupil the opportunity to value each other's work objective and immediately.

DESIGN AND RESEARCH SCHOOL ACTIVITY OF SCHOOLCHILDREN IN ASTRONOMY IN THE SECONDARY SCHOOL

Gomulina N.N.
Submitted by: Gomulina Natalia N.

At present the Astronomy as a teaching subject has no its proper place or even a line in the item list of the Federal basic school curriculum. The same situation is in schools over the all regions: practically Astronomy is not taught. But the curriculum itself can be used to introduce any subject, including the astronomy. It can be adopted to introduce Astronomy in different ways. To optimise the process of education the integrated courses are suggested (e. g. informatics and astronomy). The larger possibilities are disposed to those, who have the right to make their one schedule. Such schools are named multy-profile. In such schools there are no classroom lessons in Astronomy, but schoolchildren may come to the teacher of physics or astronomy optionally, taking certain number hours per week. Thereby, much of the school components possibly may be used to design and experimental works on physics or Astronomy. Computer communications and design activity of schoolchildren in secondary schools also can be used. It is necessary to elaborate a special programs to prepare teachers in Astronomy for secondary school.

ASTRONOMICAL EDUCATION IN ST-PETERSBURG STATE UNIVERSITY OF AEROSPACE INSTRUMENTATION

Ignatiev M.B., Pinigin G.I.
Submitted by: Ignatiev Mikhail Borisovich (kira@topol.stu.neva.ru)

St-Petersburg State University of Aerospace Instrumentation (SPUAI) was founded in 1941 named Leningrade Inst. of Aviation Instrumentation (LIAI). In 1997 LIAI was transformed to the SPUAI due to its large contribution to the space investigation and astronautics. Development of the astronomical education in SPUAI is based on the St-Petersburg educational potentiality, especially on collaboration with Pulkovo and Nikolaev observatories. It permits by contacts with professional astronomers to receive for students the current news from space science, astronomy and astronomical/space instrumentation during lecture-based courses, to take part in scientific researches during practical and experimental work on observatory facilities. The present activity in SPUAI astronomical education trend in new-technology approaches like elaboration of remote access to the observatory telescopes through computer labs and Internet, creation of CD-ROM and Web-based space/astronomy courses. SPUAI take part in creation of the Universal Virtual University, especially in collaboration with the Massachusetts Inst. of Technology in the field of preparation original space/astronomy courses.

TEACHING AIDS IN RUSSIAN ASTRONOMICAL EDUCATION

Kononovich E.V.
Submitted by: Kononovich Edward V. (konon@sai.msu.ru)

In spite of large financial difficulties the astronomical publications appear more or less regularly in Russia. There is a tendency to promote large rich editions to get more profit. However textbooks and teaching aids are also appear. The conclusion is, that the needs to