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SCIENTIFIC MEETING SCIENTIFIC PROGRAMS & ASTRONOMY EDUCATION IN SEE & UKRAINE

and

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of the

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ASTRONOMICAL COMMITTEE



SESSION 5

ASTRONOMERS AND PUBLIC EDUCATION

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Astronomy is more and more attractive for the public, especially due to the space missions. Unfortunately, the lack of special lessons in the school and of dedicated journals avoids a correct understanding of the celestial phenomena. The contribution of scientists becomes in our days not only necessary but compulsory. How to do it and who have to do it are problems not easy to solve. We need a very thorough analysis of the way in which scientific information is communicated to the general public: well done, it can be beneficial; otherwise it may drive away the new generations from research, the understanding of the phenomena, the neglect of the environment and finally from the neglect and the destruction of our own planet.

TOTAL SOLAR ECLIPSE OF 2006 IN TURKEY

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A total solar eclipse will take place on Wednesday, March 29, 2006, within a narrow path passing over half of the Earth. The shadow of the Moon will first cover the eastern coastal regions of Brasil soon after the sunrise and will travel along the Atlantic Ocean, reaching the west coast of Africa at Ghana. The shadow will then proceed from Ghana through Nigeria, Sahara Desert, Libya, and the Mediterranean Sea, entering Turkey at Antalya Bay at 10:54 UT. The 165 km wide shadow zone will travel in its path in our country from Antalya to Ordu with a speed of 3250 km/h. It will reach Mongolia at sunset via the Black Sea, Georgia, Northern Caspian See, and Kazakhstan.

Antalya and its surroundings have the best chance to observe this rare event in Turkey as far as the seasonal weather conditions are concerned. The duration of totality will be 3 min 10 s in the city of Antalya, while it will be 3 min 45 s on the center of totality 50 km east of Antalya. The coincidence of the location of our National Observatory within the totality path, with a duration totality of 2 min 14 s, is a great opportunity to carry out scientific observations. Preparations for scientific observations will be decribed.

NIKOLAEV ASTRONOMICAL OBSERVATORY - A HISTORICAL , ASTRONOMICAL, AND ARCHITECTURAL MONUMENT OF THE NORTHERN BLACK SEASHORE

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Nikolaev Astronomical Observatory (NAO) is a monument of historical, astronomical, and architectural heritage of the Northern Black Seashore. NAO is the oldest naval observatory of the South-East Europe. Among functioning observatories of the CIS, NAO is the oldest one, which have preserved its initial make-up and basic profile of astronomical research. NAO was

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founded in 1821 by admiral A. Greig as the naval observatory to provide the Black Sea Navy with navigation maps, to teach naval officers to navigate at sea by using astronomical methods. Moreover, the first director, Karl Knorre, started to carry out scientific research in astronomy.

The main object of world heritage is the main building of the observatory, which has been built in 1821-29 by an architect, F. Vunsh, taking into account the astronomical requirements. Description of the main hall, which is rectangle of 10 m., a rotunda with flat roof above the main hall and four doors and twelve windows in the rotunda walls for observation of celestial bodies by using portable astronomical instruments was made. The unique ancient astronomical instruments, such as, the meridian and portable vertical circles made by Repsold firm, have been preserved in NAO. The observatory has several astronomical clocks made in the 18th-19th centuries and a collection of astronomical books published in the 17th-19th centuries.

PRACTICAL SUMMER SCHOOL ON SPECTROSCOPY AT ROZHEN OBSERVATORY

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Spectral observations are powerful tool for studying the conditions in stellar atmospheres, chemical composition and variability in stars, in general. BNAO Rozhen with the 2m telescope and the high-resolution spectral equipment there provide possibilities for such observations. The existence of professionals with experience in spectroscopy in Bulgaria also gives a good opportunity students, PhD students and young astronomers from SEE countries to study the principles of spectroscopy and their practical application to different kind of stars. The benefit for the future will be enhancement of the level of astronomical research in stellar physics in the region, to motivate further astronomical integration in the region, and also to stop the brain drains in young astronomers from our region.

ASTRONOMY EDUCATION IN SERBIA AND MONTENEGRO

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In this paper we give a brief description of the present state of astronomy education in Serbia and Montenegro with special emphasis put on the changes introduced from June 2002 to June 2005.

THE CYCLE OF METON AND THE 86TH OLYMPIAD

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The significance of Meton's cycle, (that is the correlation between integer number of tropical years with integer number of synodic months), and its announcement during the 86th Olympiad in 432 BC are presented and discussed.