## Balkan Astronomical Meeting

## "South-East European Astronomy and Space Research – Present and Future Perspectives"

14 – 18 June, 2004, Rozhen, Bulgaria

## **ROUND TABLE DISCUSSIION**

June 15, 2004

Participants from 9 countries took part in the discussion for the future perspectives for the development of the astronomy in the region. Prof. Alexander Boksenberg and Academician Simeon Anguelov represented UNESCO-ROSTE. The Chair of the South-Eastern Branch of the European Astronomical Union, Prof. Magda Stavinschi gave a short report what has been done up to now. The moderator of the discussion, Dr. Kiril Panov expressed to UNESCO-ROSTE the thanks of all the astronomical community from the region for providing new CCD camera for the 2m telescope at Rozhen observatory. This telescope is used for observations under common projects in the region and abroad. Dr. Panov stated the next problems for the discussion:

- What can we do to improve the regional co-operation in the field of astronomy?
- 2. What can we do to better use the Rozhen Observatory as a regional Astronomical Centre for research and education?
- 3. What are the possibilities for integration of our regional research projects into the European Science?

**Dr. D. Kolev, Bulgaria** expressed the opinion that the future for the astronomy for the whole region is to join ESO together.

**Dr. J. Nuspl, Hungary** about ESO: In Hungary there is discussion about it. The Academy seems to be ready perhaps to pay the required money for the membership but the question is the payment we should do in every year. A possibility would be that ESO would buy in reverse some services and development in Hungary. This is under discussion

yet. The problem is that all of the countries who like to join would like to do the same. I think, the real question connected to ESO for our countries now is how we can use the VLT-s and other facilities. Because, the small telescopes were stopped and if we are interested only in the application of them, in this case we should think it

over, because we can buy time for them independently and at a lower cost. The connected question is the education. The young generation should be prepared to use them.

- The automatic guiding for the 2m telescope could be easily faced by the software
- developed in Hungary. In Hungary we have also some experience about the automatic
- telescope control systems. Perhaps it might be interesting to share these experiences.
- **Dr. V. Golev, Bulgaria**: Considering the global long-term strategy of joining ESO and
- ESA we should keep in mind that this means 7 MEuro annual fee for Bulgaria up to
- about 40 MEuro for Poland. Except for Greece, it is unrealistic to expect such supports
- from the governments of the countries in the SEE. Instead, we should follow the pointer
- of Hungary, where a special long-lasting program is started to join ESA step-bystep with
- much less financial duties. The other possibility is to develop interfaces for the newly
- arising programmes of Virtual Observatory and AstroGrid facilities.
- **Dr. R. Konstantinova- Antova, Bulgaria** expressed her opinion that joining ESO is an aim for a more far future. She suggested for the near future large joint projects, not only bi-lateral agreements, to be established. Astronomers not only from the region, but from the whole Europe to take part in them to work together on scientific problems of common interest. This projects to be submitted to the FP6 or FP7 and other European programs. In this way, a lot of benefits could come: new necessary equipment for the telescopes, improvement of the quality of the astronomical research, integration of the region as a whole in the European astronomy.
- **Dr. Z. Knezevic, Serbia and Montenegro**: On the level of strategic discussions the community have to consider whether it is necessary to formalize the SEE collaboration

(to sign some sort of document/protocol/memorandum) or to prefer the adhoc arrangements (bi- or multi-lateral), adjusted for particular purposes projects. On the level of the scientific actions we should try to ensure funds (UNESCO-ROSTE, EU Commission, etc.) for a number of grants to send people from one SEE country to another. To identify people capable and willing to take

the responsibility to organize, inform and coordinate groups of people with same/similar programs/research interests.

**Prof. P. Niarchos, Greece:** I think that the join ESO, ESA, to participate in large projects should be our strategy. But, the way to obtain it is not easy, and it requires long negotiations and money. In my opinion, until this aims are fulfilled, we can survive scientifically by using our infrastructure, our facilities. There are several small to medium size telescopes in the region, and we can do a lot of things with these instruments like spectroscopy and photometry of various kinds of astronomical objects. In order to be in the front of the science, we should upgrade our instruments, obtain high-quality observational data and use modern techniques for analyzing and interpreting these data. The scientific level of the astronomers in the region is very high in certain areas of research. There must be an effort to encourage scientists of the region to collaborate in various levels: exchanging visits, common programmes, projects for upgrading the infrastructure, regional meetings etc. This collaboration should be realized on the basis of bilateral cooperation or on the basis of forming groups from more countries. We should try to persuade our governments to include Astronomy in the scientific agreements they sign with the countries from the region.

**Prof. J. Seiradakis, President of the Greek Astronomical Society** gives information about OPTICON and ESA: He focused on the "access" projects fro 2-4m telescopes which supports (i) observers (travel+subsistence) after they get observing time in one of the network's telescopes and (ii) observatories for offering their facilities. ESA: Greece will be joining ESA in December 2005. Meanwhile, for the last three years Greece has been a "preliminary" member of ESA, by joining 4 ESA (technical) programmes.

His opinion on the access to electronic journals: the Greek government trough the state project has signal agreements with several publishers (e.g. Springer Verlag), according to which all the Greek Academic libraries are considered as a single user. After these agreements all these libraries have access to about 20000 electronoc journals. Similar steps should be taken on a national or regional level.

He also proposed to immediately start a list among the participants with "Expresssion on interest" on possible joint projects, e.g. "Variable stars", "Asteroids", etc.

**Dr. V. Mioc, Romania**: Along with the bureaucratic formalities – letters of agreement, bilateral protocols, etc. – we have to continue to publish joint papers in top journals. Such a publishing activity must be intensified. So far, Romania produced joint papers only with Bulgaria and Greece. Such joint papers, not only bi-lateral, but also multi-lateral will provide convincing evidences that cooperation existed, continues to exist and develops. Of course, this is a necessary condition, but not a sufficient one.

Dr. H. Rovithis-Livaniou, Greece: A possibility for bi-lateral collaboration

could come using ERASMUS project, but it is restricted between institutes belong to universities. In this case, exchange of students is very helpful although the money are not enough. Also, we publish a lot of papers to prove that collaborations exist, but is also necessary to get some funds.

- **Dr. G. Djurasevic, Serbia and Montenegro**: During the last 2 years I've published about 17 papers in collaboration with people from different countries, but I know most of them only via e-mail.
- **Dr. S. Ninkovic, Serbia and Montenegro**: We should form a body-board or committee which will be an official form of the South-Eastern Branch of EAS. Then each of us would have some thing to address to for the purpose of solving different problems.