



1 Mercurius. 2 Venus. 3. la Terre. 4. Mars. 5. Jupiter. 6. Saturnus.

Figure 3: The solar system, surrounded by fixed stars, each with its vortex. From the French edition in 1750.

during some years, for instance after the death of Caesar. Naturally, Madame is rather upset, but Fontenelle reassures her that much time is needed to destroy a World. As a matter of fact, the stars and the Sun live very long; we still see the same as our ancestors. Very poeti-

cally, he compares us with roses in a garden – each generation of roses sees the same gardener.

And here the text ends with the following words: "Oh", she exclaimed, "I have now the entire Universe in my head! I am learned!" "Yes", I replied,

"you are reasonably so . . . I only ask you to recompense my efforts by not looking at the Sun, the sky or the stars without thinking of me".

### Conclusion

I hope that the above has given a feeling of Fontenelle's book, its contents and form. We may of course smile at some of the ideas and we certainly think that there is too much talk about very hypothetical themes, like the lunar inhabitants. However, we must be impressed by the clever presentation techniques and also Fontenelle's ability to foresee his readers' objections and then convince them by easily understandable logics. He obviously fascinated contemporary readers with his most lively language and vivid examples.

The observational astronomy of Fontenelle's time was mainly descriptive and mostly concerned with the determination of positions of celestial objects. Astrophysics had not really started yet. And only one year after the first edition of "Entretiens", Newton's "Principia" in 1687 did away with all of Descartes' vortices. Still, Fontenelle was a pioneer in the popularization of our science, whom we ought to honour as such. Having made his acquaintance, his colleagues of later times may reasonably wonder, how their literary products will appear to well-informed readers after 300 years.

## The First School for Young Astronomers Organized by ESO and the Astronomical Council of the USSR Academy of Sciences

The first international school for young astronomers organized jointly by ESO and the Astronomical Council of the USSR Academy of Sciences took place from the 22nd to the 29th of September at the Byurakan Astrophysical Observatory of the Academy of Sciences of Armenia and was dedicated to "Observations with Large Telescopes". It was appropriately closed with a one-day visit to the Special Astrophysical Observatory at Zelenchukskaja, in northern Caucasus, home of the 6-m telescope, the largest in the world. The lecturers came from ESO and from the Soviet Union; the 45 participants were from ESO member states, from Bulgaria, Czechoslovakia, the German Democratic Republic, Poland, Spain and the USSR. After the welcome addresses by Academician V.A. Ambartsumian and by E.Ye Khachikian, Chairman of the Local Organizing Committee,

the school was opened by M. Tarenghi of ESO who spoke on the characteristics of existing ESO telescopes and on the innovative features of the ESO 3.5-m New Technology Telescope, to be erected at La Silla next year. H.A. Abrahamian and J.A. Stepanian of the Byurakan Observatory presented the Byurakan 2.6-m telescope and the 1-m Schmidt respectively, illustrating the scientific programmes carried out in the recent past and presently at these two facilities.

V.L. Afanas'ev and L.I. Snezhko of the Special Astrophysical Observatory spoke on the history and the status of the 6-m telescope of the Academy of Sciences. The project was started in 1960 and had to cope with two difficult tasks: fabricating the largest mirror ever and building and controlling a large mounting of alt-azimuth design. From the present performance of the tele-

scope (90% of energy within 0.8 arcsec, accurate tracking and pointing) it can now be stated that the effort has been very successful. Possibly the one limitation of the telescope is the quality of the site, which even though quite good by European standards, does not compare in a favourable way with locations in Hawaii, northern Chile or the Canary Islands in terms of numbers of clear nights. Three talks were dedicated to instrumentation at Large Telescopes: S. D'Odorico and A. Moorwood of ESO spoke of instrumentation for imaging and spectroscopy at optical and infrared wavelengths respectively; S.N. Dodonov of the techniques for multiple-object spectroscopy at the 6-m telescope. Data processing was the subject of the talks by T.Yu. Magakian, who presented the system implemented at Byurakan (ADA) and by T. Kipper who spoke about computer analysis of high-





resolution spectra at the Tartu Observatory. The subject of Very Large Telescopes of the future (aperture larger than 8 m) was treated by Prof. Woltjer, who illustrated the options open in this field and discussed in detail the properties and the status of the ESO 16-m equivalent diameter VLT project, now submitted for approval to the ESO member states. N.V. Steshenko from the Observatory of Crimea presented the preliminary plans to build in the USSR a 25-m diameter telescope with an adaptive primary mirror made up of 1-m circular segments. Our kind host in Byurakan, Academician Ambartsumian, closed the school with an inspiring talk. Drawing on examples among the amazing number of astrophysical problems that he has effectively dealt with in his 50 year career, he stressed the importance of developing modern facilities and of collecting and analysing observational data to improve our understanding of the universe, not only to reach very dis-

tant but also intrinsically faint objects. There were also a number of short but interesting reports presented by the participants and a final general discussion. The subsequent visit to the Special Astrophysical Observatory, though brief, provided the unique opportunity to see the largest optical telescope of the world and the impressive RATAN 600 radio telescope.

This first school organized jointly by ESO and the Astronomical Council of the USSR met its goal to offer to the participants a wide view of the prospects of modern observational astronomy. For the lecturers, it was an opportunity to think over and discuss some of the most recent developments in astrophysics and instrumentation and to find out about work in progress in other observatories. This was especially useful since channels of information between scientific institutions in Eastern and Western Europe are relatively rare. It is hoped that the school will be repeated in 1989 in one of the ESO countries, and that it will serve as a regular meeting point between the two communities.

Acknowledgements are due to the Di-

rector General of ESO, L. Woltjer, and to the President of the Astronomical Council of the Academy of Sciences, A.A. Boyarchuk, for promoting and supporting this initiative. A special thank-you from all of the participants goes to Professor E.Ye. Khachikian, Chairman of the Local Organizing Committee and untiring driving spirit through all of the scientific and social events of the school. Possibly, the only action in which he did not actually take part was the football match between an ESO and the Byurakan Observatory team (Byurakan won after a hard fight 5 to 2). He, and the whole of the Local Committee, are to be praised for the perfect organization.

The week of the school was blessed by magnificent weather, which made the stay in Byurakan and the weekend excursions organized to various locations of historical and architectural interest a very enjoyable experience. The topics treated during the lectures will need to be updated with time, but the beautiful landscapes of Armenia and of the Caucasus have certainly found a permanent place in the hearts of all the participants.

S. D'Odorico



Professors V.A. Ambartsumian and L. Woltjer.

#### Students to the 1987 School for young astronomers in Byurakan

G. Aliakbarov, N. Andreassian, N. Asatrian, I. Bikmaev, E. Cappellaro, M. Della Valle, A. Dobrzycki, V. Elkin, E. Giraud, G. Goumelari, V. Ambarian, U. Hopp, M. Ibrahimov, L. Iliev, Yu. Isotov, G. Javachishvili, V. Kardumian, A.M. Khalinov, A. Krivtsov, J. Kubat, T. Kvernadze, S. Larsson, L. Leedjaerv, B. Leibundgut, H. Lehmann, U.P. Linde, A. Melkonian, K.J. Mighell, S. Milyutikova, R. Morganti, E. Nikogosian, I. Nosov, G. Petrov, M.M. Pierre, G. Pogolian, K. Postno Priebe, A. Prieto, A. Richichi, O. Silchenko, S. Sudakov, G. Tovmasian, M. Tsvetkov, M. Turatto, V. Vasjuk.