

Schedule of Meetings, Second Half of 1974

The following dates were decided on:

Finance Committee, to be held at Amsterdam: October 31
Committee of Council, to be held at Amsterdam: November 1
Observing Programmes Committee, to be held at Observatoire de Haute-Provence: December 2 and 3
Scientific Policy Committee, to be held at Hamburg: December 4
Council, to be held at Hamburg: December 5 and 6

Wall Chart of 3.6 m Telescope Published

An artist's impression of the 3.6 m telescope has recently been received by the TP Division, Geneva. The artist is Tony Lofthouse, who is with the magazine "Nuclear Engineering".

He worked here entirely from engineering execution drawings, his only visual aid being the model.

Grandchamps of Annemasse has printed many copies of this 90 cm \times 70 cm drawing, which ESO will issue as a wall chart for use in seats of learning and science. The original will be framed and hung in the TP Division premises.

Telescope Control System Successful on La Silla

Transported last autumn from Geneva to Chile and subsequently installed on La Silla, the most advanced telescope control system in the world is now fully operational there.

The system was set up by a team of five people from the controls group of ESO TP Division which designed it.

They were: J. van der Lans who headed the group, P. Stürzinger, R. Zurbuchen, J. van der Ven and S. Lorenzen.

Fully computerized, the system will have an accuracy and a flexibility of operation previously unknown in astronomy. Given the coordinates from the star catalogue, the computer will, on instruction, point the telescope to any stellar object, make the necessary allowance for the particular time of observation, refraction of the air, etc., and set the position of the dome opening. Its memory can store a complete programme of work for a night prepared by the astronomer, and with very little additional trouble the computer can do a host of other jobs which the astronomer in the past had to do himself.

Developed as a prototype for ESO's big 3.6 m reflector which is being designed at CERN, the system proved so successful under test that the decision was taken to fit it immediately to the 1 m photometric telescope on La Silla. Since the system became operational, the visiting astronomers using it report that it gives complete satisfaction. Copies of it are also being built for installation on the Schmidt telescope which was commissioned last year on La Silla and on the Danish 1.5 m telescope, now under construction.

The control system is one of the first concrete results of the collaboration between ESO and CERN.

ESO established in CERN's laboratory near Geneva a telescope design and development division and a laboratory for the reproduction of sky atlases based on photographs taken by the Schmidt on La Silla.

The collaboration has meant that the experience gained at CERN in the design of large and delicate machines and the application of computer techniques to their control could be brought to bear on the problem of guiding a big telescope with the precision that astronomers demand today.

Occultation of Saturn

Most of the research on La Silla concerns stars and the stellar system, but on January 6, 1975, an event will occur which falls into a different category: the occultation of certain stars by the planet Saturn.

This phenomenon will be observed on La Silla by Dr. Michel Dennefeld and his assistant, Dr. Michel Hersé, both from the CNRS (Centre National de la Recherche Scientifique) in Paris. Dennefeld is currently working with ESO/Chile as a coopérant, in substitution for military service. The team will be completed by J. Porteneuve, optical engineer, and J. Mari, electrician.

The purpose of the observations is to determine the transparency of the rings of Saturn as a function of the radial distance to the centre of the system.

Drs. Dennefeld and Hersé have been allotted six nights (January 7–13) with the 1.52 m spectrographic telescope.

Big Hunt on ESO (B) Plates

Almost 100 plates in the ESO (B) Survey have now been taken with the Schmidt telescope, most of them in the zones -50° to -75° .

Since this area of the sky was not covered by the famous Palomar Atlas, the ESO plates show for the first time objects which are fainter than about 16^m in these fields. As the limiting magnitude of the ESO (B) Survey is about 21^m5 , there is obviously here a rich field for discoveries.

Mr. H. Schuster, ESO staff astronomer on La Silla, conducted the observations with the assistance of Mr. D. Ballereau.

In order to systematize the search for new objects, a joint programme has been initiated between ESO and Uppsala Observatory in Sweden. The coordinators are Professor E. Holmberg, for Uppsala, and Dr. R. M. West for ESO.

The aim of this search is to identify all the brighter, already-known galaxies which are seen on the plates, and to find new, fainter ones which are interesting from an astronomical point of view. So far, on the first 40 plates, more than 200 peculiar, and in some cases interconnected, galaxies have been found.

At the same time, all known stellar clusters and planetary nebulae are being listed.

The results of this ESO/Uppsala collaboration will be published in the *Astronomy and Astrophysics Supplement*.