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The New Research Student Programme of the European Southern Observatory

H. VAN DER LAAN, Director General, ESO

For many years ESO has appointed young astronomers as Fellows to work one to two years at Headquarters or on La Silla. The HQ Fellows spend the greater part of their efforts on personal research, the Fellows on La Silla split their time roughly 50/50 between their research and support astronomy duties. The ESO Fellowship programme has successfully contributed to the development of young scientists from member states into mature research astronomers. It has also promoted the interaction among investigators from many places and traditions, interactions that continue long after the collaborators have left their ESO posts. This postdoctoral Fellowship programme continues undiminished.

Henceforth ESO is also offering Studentships, about 8 appointments per year, equally shared between Garching and La Silla. This article introduces this new predoctoral Studentship Programme.

Selection and Studentship Conditions

ESO aims at having sixteen such graduate students in the Organization's establishments at any time. The programme will be semi-annually announced in the *Messenger* and by the circulation of announcements in member states' institutes. Applicants have to make use of a form designed for the purpose and available upon request from Personnel and General Services at Headquarters. Deadlines for application will be May 1st and December 1st. Appointments can commence throughout the year.

Students whose duty station is the Garching Headquarters, will be required to spend at most 25% of their official

working time on duties in support of Visiting Astronomers (users of measuring machines, of computers with the IHAP and MIDAS data reduction systems, and astronomers using the Remote Control Observing Facilities). Students on La Silla will normally be part of the team in the La Silla astronomy department that provides introductions and observational support to Visiting Astronomers. Typically, half their official working time will be occupied by these duties.

Students are appointed for one year, normally renewable by a second, final year. During their studentship term, they may have diverse forms of support from their home institution. ESO will supplement these to a maximum, total stipend of DM 2200/month during the first year.

For many years young astronomers and engineers from France, called *coopérants*, have worked on La Silla in national service, which is an alternative to military duty. More recently Belgium and Italy also offer such "*coopérant*" programmes. Henceforth ESO will require *coopérants*, whether at HQ or on La Silla, to meet at least the same requirements as candidates for studentships. *Coopérants* are normally pre-selected by national selection committees and then proposed to ESO. Some *coopérants* already have a doctor's degree and are then regarded as Fellows. Where they are selected by studentship criteria the *coopérants* will henceforth be counted as part of the contingent of 16 students.

Selection Criteria – Necessary Conditions

– Candidates must be registered post-graduate students at a recognized university in an ESO member state.

- Candidates must have at least an outline of their Ph.D. dissertation programme and a professor who accepts responsibility for that programme and the student's supervision.
- The candidate must have fulfilled the normal course- and examination requirements for the Ph.D., except the dissertation research.
- The candidate's programme must be such that it can be successfully pursued at ESO HQ or on La Silla, because of its affinity with work going on there and facilities available for the student.
- The candidate's university must guarantee the conditions necessary for the student to complete her/his dissertation after the tenure of the ESO Studentship.
- An ESO staff member must be prepared to be the student's local supervisor and mentor, notwithstanding the continuing responsibility of the student's university supervisor.

From this list it should be obvious that ESO in no way seeks to play the role of a degree-granting institution. The programme means to provide opportunities, circumstances and facilities which enhance the participating universities' postgraduate programmes and enrich selected students' early research experience. The conditions listed above are necessary. From among applicants potentially capable of meeting them, ESO will select those whose talents and circumstances are best attuned to the programme's goals.

Groups Where Research Students May Work

There is a brochure in preparation, available in a few months, which will describe the programme in some detail.

For the moment the following brief indications suffice. It is expected that most of the studentships will be offered in the Astronomy Group of the Science Division at Headquarters in Garching and in the Astronomy Department at the La Silla Observatory. In addition, more instrumentally oriented students may work in one of three groups in the Project Division at Headquarters, viz. Optical Instrumentation, Infrared Instrumentation and High Resolution Imaging and Interferometry. Computer science students may find possibilities in the Image Processing Group of the Science Division, and occasionally physics or engineering students can be engaged in one of the three discipline groups of the Technology Division, viz. Electronics, Optics and Mechanics.

On La Silla, the latter interests may also be served in the department called Technical Research Support. The just mentioned technology disciplines are also practised in the TRS. Finally the SEST group, running the Swedish-ESO submillimetre telescope on La Silla, and the group known as VLT Site Services provide a good context for a variety of

astronomical, technical and atmospheric research interests.

ESO Motives for the Studentship Programme

There are many, most quite obvious, and I mention but a few. ESO is firstly a service organization for European astronomy. To fulfil this mission there is a heavy operational, technological emphasis in what we do: the reliability of the service is paramount. All this activity aims at enabling the best astronomical research attainable. The quality of this work requires an acute awareness of astronomy's requirements. Having research students in our teams in addition to fellows, to visitors and to staff serves this purpose: research students, bright, ambitious, naively demanding, contribute to the **research mindedness** of an institution. This needs to be maintained both in Garching and on the mountain.

Secondly, the studentship programme serves to extend the **linkage** of ESO to Europe's universities, of ESO staff to the academic staff of the astronomy institutes in its users communi-

ty. Such linkage is indispensable for the continuous information flow that keeps our priorities and services attuned to the research requirements of the users.

A third aspect concerns the long-term quality and ambitions of European astronomy embodied in the next generation. The fellows and students who spend a year or two within ESO are better equipped to use its facilities for their personal research in future. In addition, and just as important, they will enable the institutes that employ them to use ESO telescopes and services to best advantage. They are the **vanguard of VLT observers**, training now and set to work for decades in the next century.

Finally, and related to the preceding point, these youthful scientists establish patterns of professional and personal relations among themselves, relations that will guide their collaborations and projects of the future. The result will be a lowering of national boundaries, the growth of **European excellence** in astronomy. And that too is ESO's *raison d'être*.

The Users Committee (UC)

B. MARANO, UC Chairman, Osservatorio Astronomico, Bologna, Italy

The Users Committee meets as a rule once a year, in May. Besides the national representatives, the meeting is attended by the Director General and by the Heads of La Silla, of the Image Processing and Measuring Machines, and of the Visiting Astronomers Office. Other members of the ESO staff may attend, especially if they are directly involved in some item in the agenda.

The meeting is opened by a report of the Director General on the present ESO state and future perspectives. The Head of La Silla then reports on more technical subjects, as, for instance, statistics of failures at the telescopes and recent or foreseen improvements in the instrumentation. A similar report on image processing and measuring machines often follows.

National representatives are then called to speak. They have collected from their colleagues complaints, impressions, suggestions. Their reports can span from the description of problems pointed out by a single observer or group to very general matters. A few examples of general issues raised in the last two meetings can better give the spice of the discussion: introduction of service observing, future of small tele-

scopes on La Silla, deterioration of the dome seeing at the 3.6-m telescope, flight safety.

The agenda is often closed by some specific items, related to current or foreseen projects. In the last meeting, for instance, the Users Committee

heard two reports on key programmes and ESO policy on data archiving.

The atmosphere is always sound and collaborative, and plenty of time is devoted to the discussion of each item. The effectiveness of the Users Committee must also be evaluated on

THE USERS COMMITTEE

Membership

The members (one from each member country) are appointed by the Director General from among the recent Visiting Astronomers for four year terms (not immediately renewable). The terms are staggered, so that each year two persons are replaced. The Committee annually selects its Chairman. National Committees are invited to submit nominations for membership to the Director General.

Present Composition of the UC

M. Azzopardi, France, 1988–1991
L. Hansen, Denmark, 1987–1990
F.P. Israel, Netherlands, 1986–1989
J. Krautter, F.R. Germany, 1989–1992

B. Marano (Chairman), Italy, 1986–1989
B. Stenholm, Sweden, 1989–1992
J. Surdej, Belgium, 1987–1990
Chr. Trefzger, Switzerland, 1986–1989

Functions

The Committee advises the Director General on matters pertaining to the functioning of the La Silla Observatory from the point of view of the Visiting Astronomers. It should consider the possibility to arrange a Users Conference.

Functioning

The Committee meets at least once a year. It is convoked by the Director General.