

sion will remain necessary for many years, at least in the main libraries. As such a version is expensive to produce, no substantial cost savings are to be expected for the moment. Even if a digital support is ultimately chosen for archiving, permanent update and maintenance of the archive will be necessary and will be costly.

– Electronic publication should be oriented towards an optimization of information retrieval: this retrieval must be as easy and rapid as possible. In particular, access to interesting papers must be immediate, including drawings and half-tones. NASA is starting a programme named STELAR (for Study of Electronic Literature for Astronomical Research) in which they will scan and put on digital form the years 1986–1990 of the AAS publications, and hopefully of European journals as well, and let a group of voluntary astronomers make experiments in information retrieval using commercial or their own software packages. This programme, that our study group will watch closely, will certainly be determinant for the future of electronic publication.

There are two types of possibilities for electronic journals:

- journals accessible via computer networks (“e-mail journals”);
- journals distributed on some individual digital support.

E-Mail Journals

The fast development of communication networks makes this solution very attractive. Technically it is fully possible at present for text and drawings, although the transmission of half-tones is still problematic and rather slow for the general customer. Reading an e-mail journal requires on-line decoding e.g. of a text produced in $T_{\text{E}}\text{X}$ (the obvious standard at least in the immediate future), and of the figures for which a standard remains to be established. For the moment, these operations are slow and cumbersome, especially for figures, but this will certainly improve fast. It is likely that at least for some time the scientist interested in a paper will first print it out. This will be costly, but it may be that ultimately we will be so well acquainted with electronic displays (of high quality, I presume) that this stage can be skipped.

I cannot foresee any problem with the refereeing procedure: all the exchange between author, editor and referee involving paper can be made electronically. However, difficult problems with copyright and recovery of publication costs should be addressed amongst others. One problem that will probably remain for a rather long time is the inter-

mittent difficulty of access due to network and computer crowding. Also, you will not be able for some time to consult your favorite journal in the train or in the plane, unless you have in advance printed or copied on an individual digital support the papers you are interested in. Finally, this solution is unfair to developing countries or isolated places that are still outside the main communication networks; but this will not last for long, probably.

Journals Distributed on Individual Digital Support

In principle this solution avoids most of the problems just discussed with e-mail publication. However, it has its own problems, which are so severe that I have the feeling that it will not make it for the future. For example, it requires that you have on your personal computer a sophisticated reading software and also a screen good enough for a nice

VACANCIES ON LA SILLA

STAFF ASTRONOMER

A position of staff astronomer will become available on La Silla in the second half of 1992. This position is open to experienced astronomers with a Ph.D. degree or equivalent and several years of post-doctoral experience in the area of infrared imaging and/or spectroscopy using array detectors.

The successful applicant will integrate the IR group on La Silla and will share the responsibility of operating the infrared cameras and the infrared spectrograph (IRSPEC). This includes:

- introducing visitors to the use of the equipment,
- writing and updating User's Manuals,
- developing and upgrading data-reduction packages,
- regularly testing the performance of the equipment, and
- interacting with the technical staff regarding modifications and updates of the instrumentation and the control software.

As members of the Astronomy Support Department on La Silla, staff astronomers are required to spend at least 50% of their time on support activities and the remainder conducting original research and participating in academic activities. The Astronomy Group on La Silla is composed of about 20 astronomers including staff, post-doctoral fellows and research students.

Staff posts are tenure track positions, normally offered for an initial period of 3 years that may be renewed for a second period of 3 years. Tenure may be granted during the second term of the staff contract.

The successful applicant will have an excellent opportunity of participating in the commissioning phases of the VLT.

Applications should be submitted to ESO Personnel Administration and General Services at ESO-Garching **before 31 May 1992**.

FELLOWSHIP

A post-doctoral fellowship is offered on La Silla starting during the second half of 1992. This position is opened to a young astronomer with an interest in stellar photometry. Experience in CCD photometry in crowded field will be an advantage. The ESO fellowships are granted for a period of one year, normally renewed for a second and exceptionally for a third year.

The successful applicant will be required to spend 50% of his/her time doing support activities and 50% of the time on research.

Applicants normally should have a doctorate awarded in recent years. Applications should be submitted to ESO **not later than 15 May 1992**. Applicants will be notified by June 1992. The ESO Fellowship Application Form should be used and be accompanied by a list of publications. In addition, three letters of recommendation should be obtained from persons familiar with the scientific work of the applicant. These letters should reach ESO **not later than 15 May 1992**.

The research interests of the members of the staff in the Astronomy Support Department include low-mass star formation, formation and evolution of massive stars and starbursts, post-AGB stellar evolution and planetary nebulae, supernovae, active nuclei, high redshift galaxies and galaxy clusters. Staff members and senior fellows act as co-supervisors for students of European universities that spend up to 2 years on La Silla working towards a doctoral dissertation.

Enquiries, requests for application forms and applications should be addressed to:
European Southern Observatory
Fellowship Programme
Karl-Schwarzschild-Straße 2
D-8046 Garching b. München
Germany