

Joint Committee Between ESO and the Government of Chile for the Development of Astronomy in Chile

In accordance with Article Nine of the interpretative, supplementary and amending agreement to the "Convention between the Government of Chile and the European Organisation for Astronomical Research in the Southern Hemisphere for the Establishment of an Astronomical Observatory in Chile", a Joint Committee has been constituted, on 13 March 1998, to co-operate directly in programmes for training young scientists, for engineers and technologists, and for equipment in general. The founding document was officially signed by the Minister of Foreign Affairs, His Excellency Mr. José Miguel Insulza S., and the ESO Director General, Prof. R. Giacconi.

The membership of this Committee consists of three representatives of the Government of Chile, the Director of "Política Especial", Ambassador R. González, the Chairman of the Presidential Commission for scientific matters, Dr. C. Teitelboim, and the Australian Astronomer Dr. K. Freeman, and three representatives of ESO, the Associate Director for Science, Dr. J. Bergeron, the Director of the Paranal Observatory, Dr. M. Tarenghi, and the ESO Representative in Chile, D. Hofstadt.

To foster scientific and technical co-operation between ESO and Chile, ESO will provide and administrate funds allocated for the development of astronomy and related technologies in Chile. The Joint Committee has the responsibility to define the framework of the co-operation, and to evaluate and select the programmes which will be financed by these funds.

Prior to the first meeting of the Joint Committee, extensive consultation took place between the Chilean astronomers and Dr. K. Freeman. The discussions during the meeting were very positive, and unanimous decisions were easily reached. On 13 March 1998, the Joint Committee agreed to make an announcement of opportunities for the six programmes summarised below:



- **Creation of new astronomical research groups.** To help Chilean Academic Institutions in the creation of an astronomical group, ESO will share with the selected Academic Institution the costs of hiring a full professor for a two-year period and two associate professors for a one-year period. After those terms have expired, the Academic Institution will take over the established programme.

- **Complementary funding for post-doctoral Astronomy programmes.** The goal of this programme is to make post-doctoral positions at Chilean Academic Institutions competitive at the international level.

- **Strengthening of already established astronomical research groups.** To this end, ESO will finance two new posts for full or associate professors for a three-year period. This term may be extended to a five-year period. After those terms have expired, the hosting Aca-

demical Institutions will commit themselves to maintain these new positions.

- **Training of professors for the teaching of astronomy in high schools.** Special attention will be given to programmes which are already sponsored, and ESO will share their funding.

- **Research infrastructure.** The goal of this programme is to strengthen the research capacities of academic institutions.

- **Development of systems and instruments.** Chilean engineers and technicians will be invited to participate, through public tenders, in the development of systems and instruments for the VLT telescope units.

The total level of funding available in 1998 for this ESO-Chile co-operation programme is DM 660,000. Additional programmes by ESO (for DM 340,000 in 1998) include social help to local communities, education programmes in high schools and university scholarships.

ESO Imaging Survey: Update on EIS-deep and the Hubble Deep Field South

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The second part of EIS (deep), as originally recommended by the EIS Working Group, envisioned the observation of a 15×15 arcmin region centred on the HST

Hubble Deep Field South (HDF-S), in six passbands (the EIS proposals for Periods 59, 60, and 61 can be found at http://www.eso.org/research/sci-prog/eis/eis_

[obs.html](http://www.eso.org/research/sci-prog/eis/eis_obs.html)). The programme was split between Periods 61 and 62, and 7 SUSI2 and 6 SOFI nights in Period 61 have already been allocated. However, with the

final selection of the HDF-S by ST Scl ($\alpha = 22^{\text{h}}32^{\text{m}}56^{\text{s}}$, $\delta = 60^{\circ}33'02''$) it became clear that the selected field is not ideal for deep imaging as it contains several relatively bright stars. Taking this into account, the EIS Working Group in its meeting of January 21–22, 1998 decided to recommend a different field coverage for EIS-deep. The WG now proposes EIS-deep to cover the minimum area required to include all HDF-S fields (WFPC2, NICMOS, STIS) and use the remaining observing time to cover a new field at high galactic latitude. In accordance to the reviewed strategy, the following observations are now planned, pending the endorsement of the OPC for those in Period 62:

1. The observations of the HDF-S will cover three adjacent SOFI/SUSI2 fields (5×5 arcmin each) which will include the WFPC2, NICMOS and STIS fields. In this way adequate target selection can be

secured for spectroscopic studies with FORS1 and ISAAC, for which teams in the community may wish to apply to the OPC. Note that HDF-S may also be observed with the VLT first Unit Telescope as part of the VLT Science Verification (see article by Leibundgut, de Marchi and Renzini in this issue).

2. The remaining deep imaging observations will be conducted in the direction of the region with the lowest H I column density in the Southern Hemisphere ($\alpha = 03^{\text{h}}32^{\text{m}}28^{\text{s}} = -27^{\circ}48'30''$), equivalent to the well-known Lockman hole in the North. The field contains very few stars, hence it is ideally suited for very deep optical imaging. It has also been chosen for a very deep AXAF exposure (field size 15×15 arcmin). The field will be covered by four contiguous tiles (10×10 arcmin) with both SUSI2 and SOFI, with the same filters and depth as for the HDF-S field. Besides J and

Ks imaging, H-band observations are also proposed for this field. This will make the data coverage of this field equivalent to that of the HDF-S field where the H-band observations will be carried out and made public by CTIO.

The recommended limiting magnitudes at 5σ remain the same as in the proposal for Period 61, while the 'g'-band imaging has been replaced by *B* and *V* observations since an optimal 'g'-band filter is not yet available. For the optical passbands the targeted limiting magnitude is ~ 26 mag in all filters. In the infrared the observations are expected to reach $J \sim 23.5$, $H \sim 22.5$ and $Ks \sim 21.5$, except in the WFPC2 field where the WG has recommended that the SOFI observations should reach ~ 0.5 magnitude deeper than in the other fields.

More information on EIS-deep can be found at "<http://www.eso.org/eis>"

ESO Fellowship Programme 1999

The European Southern Observatory (ESO) awards up to six postdoctoral fellowships tenable at the ESO Headquarters, located in Garching near Munich, and up to six postdoctoral fellowships tenable at ESO's Astronomy Centre in Santiago, Chile. The ESO fellowship programme offers a unique opportunity to learn and to participate in the process of observational astronomy while pursuing a research programme with state-of-the-art facilities.

ESO facilities include the Very Large Telescope (VLT) Observatory on Cerro Paranal, the La Silla Observatory and the astronomical centres in Garching and Santiago. At La Silla, ESO operates eight optical telescopes with apertures in the range from 0.9 m to 3.6 m, the 15-m SEST millimetre radio telescope, and smaller instruments. The VLT consists of four 8-m diameter telescopes. First light for the first telescope is expected late May 1998. Both the ESO Headquarters and the Astronomy Centre in Santiago offer extensive computing facilities, libraries and other infrastructure for research support. The Space Telescope European Coordinating Facility (ST-ECF), located in the ESO Headquarters building, offers the opportunity for collaborations. In the Munich area, several Max-Planck Institutes and the University Observatory have major programmes in astronomy and astrophysics and provide further opportunities for joint programmes. In Chile, astronomers from the rapidly expanding Chilean astronomical community collaborate with ESO colleagues in a growing partnership between ESO and the host country's academic community. The main areas of activity at the Headquarters and in Chile are:

- research in observational and theoretical astrophysics;
- constructing and managing the VLT;
- developing the interferometer and adaptive optics for the VLT;
- operating the Paranal and La Silla observatories;
- development of instruments for the VLT and La Silla telescopes;
- calibration, analysis, management and archiving of data from ESO telescopes;
- fostering co-operation in astronomy and astrophysics within Europe and Chile.

In addition to personal research, fellows spend a fraction of their time on the support or development activities mentioned above:

In Garching, fellows are assigned for 25% of their time to an instrumentation group, a user support group or a telescope-operation team in Chile. The fellowships are granted for one year with the expectation of a renewal for a second year and exceptionally a third year.

In Chile, the fellowships are granted for one year with the expectation of a renewal for a second and third year. During the first two years, the fellows are assigned to a Paranal operations group or a La Silla telescope team. They support the astronomers at a level of 50% of their time, with 80 nights per year at either the Paranal or La Silla observatory and 35 days per year at the Santiago Office. During the third year, two options are provided. The fellows may be hosted by a Chilean institution and will thus be eligible to propose for Chilean observing time on all telescopes in Chile; they will not have any functional activity. The second option is to spend the third year in Garching where the fellows will then spend 25% of their time on the support of functional activities.

The basic monthly salary will be not less than DM 4853 to which is added an expatriation allowance of 9–12% in Garching, if applicable, and up to 40% in Chile. The remuneration in Chile will be adjusted according to the cost of living differential between Santiago de Chile and the lead town Munich. The fellow will also have an annual travel budget, for scientific meetings, collaborations and observing trips, of approximately DM 12,000.

Fellowships begin between April and October of the year in which they are awarded. Selected fellows can join ESO only after having completed their doctorate.

Applications must be made on the ESO Fellowship Application Form. The form is available either at URL <http://www.hq.eso.org/gen-fac/adm/pers/vacant/fellow.html> or from the address below. The applicant should arrange for three letters of recommendation from persons familiar with his/her scientific work to be sent directly to ESO. Applications and the three letters must reach ESO by October 15, 1998 (but not earlier than June 1998).

Completed applications should be addressed to:

European Southern Observatory
Fellowship Programme
Karl-Schwarzschild-Str. 2
D-85748 Garching bei München, Germany

Tel.: 0049-89-32006-438 or -219 — Fax: 0049-89-32006-497
e-mail: ksteiner@eso.org