ESO is opening the following management positions of

**Senior Astronomer**

Director of the La Silla Paranal Observatory

The Director responsible for the Observatories on La Silla, Paranal and APEX will lead a multidisciplinary team and act as a link between user community, the Director General and the Observatories. She/he will in particular be responsible for:
- the continuation, creation and implementation of scientific and technical policies for the operation of the Observatories in accordance with ESO's overall policy
- the management of the Observatories and their staff members through the definition and implementation of goals and objectives
- the Observatories' budget
- the representation of all Observatories in the science community, public and public relations (e.g. media support, exhibitions, presentations, etc.) in close interaction with ESO's representative in Chile and the Public Affairs Department.

The Director of the Observatories reports directly to the Director General. The staff of the Observatories presently consist of about 70 international and 150 local staff members who work in groups or teams. As a senior astronomer the Director of the Observatories is a member of the ESO science faculty and is expected and encouraged to actively conduct astronomical research. She/he should foster the participation and integration of the scientists of the Observatories in the ESO faculty and in the Office for Science in Santiago.

Basic requirements for the position include a Ph.D. in astronomy, astrophysics or physics, or related fields, substantial and long or equivalent experience in management and leadership preferably gained within multinational scientific organisations. A proven record in astronomical systems such as instruments, large optical telescopes or systems of equivalent complexity as well as an outstanding record of astronomical research and international scientific collaborations are required. Initiative, ability to judge, to decide and to work with people of different nationalities as well as excellent communication skills are essential. The position requires a very good knowledge of English and a working knowledge of Spanish or willingness to learn it.

**Associate Director**

The primary purpose of this position is to support and assist the Director General in the discharge of his/her duties. The Associate Director reports directly to the Director General and is required to work closely with division heads and other senior staff in the Organisation. She/he shall carry out such tasks as requested or delegated by the Director General which shall include, but not be limited to, responsibility for:
- providing the Director General with briefing material and appropriate analysis on any matter which could have implications for the operation of ESO
- the management of the Council secretariat
- the management of the ALMA board and European ALMA board business, and specifically acting as ALMA board secretary when the chair is nominated by ESO.

An appropriate professional qualification as well as substantial management and leadership experience within a scientific organisation, preferably international, are required. Excellent communication skills and a very good knowledge of English are essential.

As members of the ESO management both job holders contribute directly to the development of the overall policy, the strategic planning, and maintain professional contacts at highest level outside the Organisation.

For details and to download an application form, please consult our homepage: http://www.eso.org. If you are interested in working in areas of frontline technology and in a stimulating international environment please send your application in English to:

ESO Personnel Department, Karl-Schwarzschild-Straße 2
85748 Garching near Munich, Germany

E-mail: vacancy@eso.org

ESO is an equal opportunity employer. Qualified female candidates are invited to apply.

ESO. Astronomy made in Europe
ESO is opening the following positions of

**Instrument Scientist**

This position is in the Instrumentation Division which is responsible for the design and development of advanced optical and infrared instruments for the Very Large Telescope and other telescopes at ESO’s La Silla Paranal Observatory and, in the future, for a possible Extremely Large (30–60 m diameter) Telescope (see http://www.eso.org/instruments/).

The successful candidate will initially work in the Optical Instrumentation Department as Instrument Scientist of the X-shooter, a medium-resolution echelle spectrograph for the VLT, covering in one exposure the spectral region from the UV to the K-band and expected to go to the telescope in 2008. She/he will directly be in charge or collaborate with the P.I. and project manager of the project in various tasks related to the documentation for the instrument (e.g. calibration plan, commissioning plan, user manual), the development of the exposure time calculator, of the data-reduction pipeline, the testing of the instrument in Europe and the commissioning in Chile. She/he will be responsible for verifying that the overall performance of the instrument at the telescope matches the specified values, and support the operation during the first year. In parallel, she/he will be involved in the definition studies of other instrument projects for the VLT and possibly the ELT.

Basic requirements for the position include qualified experience in observational astronomy at optical or IR wavelengths at large telescopes. A proven, strong record of scientific research in areas which are related to the functional work and good experience with spectroscopic data-reduction packages in IDL, IRAF or MIDAS are a requirement.

This is an astronomer position in the ESO faculty. The successful candidate is expected to carry out a vigorous research programme in the field of observational astronomy. He/she is entitled to work up to 50% on scientific research and will receive financial and technical support by the ESO faculty for this purpose.

**Front End Production Engineer**

Within the European ALMA team, the selected candidate will take up responsibilities in the production engineering, integration and monitoring of contracts for the receivers of the ALMA radio telescope.

The position will include the following tasks:
- management, both technical and programmatic, of individual production work packages for the ALMA Front End (FE) subsystem and the related production contracts
- developing front end integration and test plans, and assist in the development of an operations and maintenance plan in close collaboration with ALMA system engineers
- quality management: definition of applicable processes, mainly in the areas of production, integration and validation. Participation in and organisation of product reviews
- assisting in developing and maintaining the FE subsystem specifications and interfaces. Assuring that subsystem designs comply with defined specifications.
- keeping track of detailed subsystem performance of the front end technical budgets.
- contributing to the ALMA configuration and change-control processes.
- reporting directly to the European ALMA Front End IPT manager.

We seek a professional with a university degree in engineering, in one or more of the following fields: electronics, technical physics or other relevant fields and at least five years of working experience in an engineering position on multidisciplinary, high-technology, and complex electronics project(s).

For details and to download an application form, please consult our homepage: http://www.eso.org.

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**Software Engineers**

The successful candidates will work within the Data Flow Systems (DFS) Department, which is responsible for designing, implementing, testing and maintaining the Data Flow System used to operate ESO’s Very Large Telescope (VLT) array.

Two positions are opened in the area of detailed design, development and documentation of components of the back-end DFS, that is the collection of client server applications used on-line at the Observatory and off-line in Garching to collect, archive and organise the raw data, schedule and parallel their processing. Sound experience in Java, C++ and a solid understanding of data archives are required.

An additional position is opened to the verification and validation of a subset of the DFS, starting with the back-end applications used at the Observatory and in Garching. She/he will be responsible for defining, implementing and executing manually or automatically test cases to ensure that users’ requirements have been met and that the behaviour under abnormal or extreme conditions is acceptable. Test data will have to be defined and maintained, test plans and reports produced and discussed with development teams, according to DFS Software Quality Assurance standards. A first level support to DFS users should be provided. Finally, she/he will contribute to the DFS installation activities and software configuration management. A minimum of three years of experience in testing and integration of complex distributed software applications running on UNIX platforms is required.

For details and to download an application form, please consult our homepage: http://www.eso.org.

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