



ESO

European Organization
for Astronomical
Research in the
Southern Hemisphere



For the ALMA Regional Centre (ARC) Department within the Data Management and Operations Division (DMO) at its Headquarters in Garching near Munich, Germany, ESO is opening the position of a

ALMA Regional Centre Scientist

Career Path: V

Purpose of the Job

The ALMA project is an international collaboration to construct and operate a large submillimeter - millimeter-wave interferometer array in the Atacama Desert of northern Chile. ESO leads and administers European participation in the ALMA project. ALMA will be operated by the Joint ALMA Observatory (JAO). The European ARC shall be the primary interface between the JAO in Chile and the European user community. The European ARC consists of a main centre located in the DMO Division at ESO and several local nodes located in institutes of different European countries.

The core of the ARC activities will consist of:

- Assisting the user community with the technical preparation of observing proposals;
- Ensuring that the observing programs are compliant with the requirements set by their scientific goals and make an efficient use of the facility;
- Running a help-desk for the submission of proposals and observing programmes;
- The delivery of data to principal investigators;
- The maintenance and refinement of the ALMA data archive;
- Providing feedback to the operation-related software systems; and
- The implementation and integration of new software algorithms and scripts within the existing ALMA software packages.

Responsibilities and Working Environment

We are looking for a scientist working at the ARC in a team led by the ARC Manager. This team will consist of several astronomers and scientists and will work in cooperation with the other departments of the DMO Division. The team will also work closely with the ARC nodes.

The duties of the ARC Scientist include:

- Implementing new data reduction scripts and applications relevant to ALMA within the CASA offline software package;
- Implementing advanced algorithms for mosaic imaging of large areas of sky with specific application to ALMA in close collaboration with the ARC nodes;
- Integrating software for and carrying out a pilot interoperability programme to process an interferometric dataset using various data-reduction packages in collaboration with the Joint Institute for VLBI in Europe (JIVE);
- Participating in testing the ALMA operations-related software, providing requirements and feedback to the software developers and reporting bugs;
- Managing the helpdesk system for the European ARC; and
- Answering queries from external users.

The successful applicant will be expected and encouraged to use 20% of the time to actively conduct astronomical research. Research in areas directed towards using the ALMA facilities will be particularly supported.

Extensive travel within the European community is required, and possibly also to partner organisations in North America, Japan and Chile.

Qualifications

PhD in Astronomy, Physics or equivalent.
A good command of the English language is essential.



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Experience

Relevant experience in the use of software, involving at least the development of software procedures and scripts preferably in radio astronomy is required.

Background in radio interferometry and/or mm/submm observing, familiarity with radio-astronomy reduction packages (AIPS, CASA, MIRIAD, GILDAS, etc.) and programming experience, ideally in C++ or Python, are highly desirable.

Key Competences

The ideal candidate should be able to:

- Provide clear, concise and timely oral and written communications, identifying the key issues, examining options and proposing a way ahead;
- Work constructively in a team;
- Speak to colleagues at all levels;
- Build strong and effective links with other teams and external partners; and
- Have a pro-active approach to contribute ideas for improvements and developments.

Duty Station: Garching near Munich, Germany.

Starting Date: As soon as possible.

Remuneration and Contract

We offer an attractive remuneration package including a competitive salary (tax free), comprehensive pension scheme and medical, educational and other social benefits as well as financial help in relocating your family and the possibility to place your child(ren) in daycare up to the age of 6.

The initial contract is for a period of three years with the possibility of a fixed-term or indefinite extension based on scientific as well as functional achievements. The title or grade may be subject to change according to qualification and the number of years of experience.

Application: If you are interested in working in areas of frontline technology and in a stimulating international environment, please visit (<http://www.eso.org>) for further details.

Applicants are invited to apply online at <https://jobs.eso.org/>. Applications must be completed in English and should include a motivation letter and CV.

Closing date for applications is 30 April 2009.

Although recruitment preference will be given to nationals of ESO Member States (members are: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Italy, the Netherlands, Portugal, Spain, Sweden, Switzerland and United Kingdom) no nationality is in principle excluded.

The post is equally open to suitably qualified male and female applicants.