The European Organisation for Astronomical Research in the Southern Hemisphere (ESO) is the foremost intergovernmental astronomy organisation in Europe and the world's most productive ground-based astronomical observatory. ESO carries out an ambitious programme focused on the design, construction and operation of powerful ground-based observing facilities enabling astronomers to make important scientific discoveries.

ESO operates three unique world-class observing sites in northern Chile: La Silla, Paranal and Chajnantor (home to ALMA and APEX), and the ESO Headquarters are located in Garching, near Munich, Germany.

At Paranal, ESO operates the Very Large Telescope, the world's most advanced visible-light astronomical observatory, and will host and operate the southern array of the Cherenkov Telescope Array, the world's largest and most sensitive high energy gamma-ray observatory. ESO is a major partner in ALMA, the largest astronomical project in existence. And on Cerro Armazones, ESO is building the 39-metre Extremely Large Telescope (ELT), which will become "the world's biggest eye on the sky" and whose operations will be fully integrated into the Paranal Observatory.

Due to the need for additional resources associated with the ELT programme, for its ELT Programme Office, within the Directorate of Programmes at its Headquarters in Garching, near Munich, Germany, ESO is advertising the position of

# **ELT Deputy Telescope Scientist**

This is an excellent opportunity for physicists/astronomers with experience in optics and instrumentation. The role is foreseen to support the ELT Telescope Scientist in providing assistance in the planning for, and execution of, the commissioning activities for the telescope.

#### Main Duties and Responsibilities:

- As a physicist/ astronomer, the postholder will work within the Programme Engineering Team, collaborate
  with the ELT Telescope Scientist and the ELT Wavefront Architect in developing and deploying the
  commissioning strategy for the ELT;
- Become distinctly familiar with all aspects of the control strategy of the ELT and will collaborate with the Assembly Integration and Verification team in the development of a coherent plan for the commissioning of the ELT;
- Participate in the development and testing at ESO HQ in Garching of the metrology systems and of the control system of the ELT prior to installation at the Armazones site;
- Participate in the execution of the ELT commissioning plan at Armazones;
- The Deputy Telescope Scientist has 20% of their time reserved for individual research.

The above responsibilities are not exhaustive and a flexible approach and willingness to adapt to unexpected needs is required.

#### Reports to:

The ELT Programme Engineer

### **Key Competences and Experience**

Essential Competences and Experience:

- familiarity with optical design (e.g. Zemax) and alignment of bench systems;
- familiarity with instrumentation, data analysis and observational techniques;
- experience in use of observing facilties;
- solid knowledge of data processing packages;
- coding experience in Python or equivalent;
- excellent organisational and time-management skills;
- excellent cross-disciplinary communication skills both oral and written;
- capacity to identify key issues, examining options and proposing a way ahead;
- flexibility to act and react quickly when confronted with unexpected situations or challenges;
- effective and committed team member;
- ability to work in a multi-cultural environment.

### Desirable Competences and Experience:

- familiarity with MATLAB;
- experience with active optics and wavefront analysis;
- familiarity with control theory.

#### **Qualifications:**

Essential educational level: PhD in astronomy, physics or equivalent.

### Language Skills:

A very good command of the English language - oral, reading and writing is essential.

#### **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/children in daycare.

The contract is for a fixed term duration of three years, and is subject to successful completion of the probation period. There is a possibility of extension(s) subject to individual performance and organisational requirements, in particular for the ELT Programme, and as defined in the applicable policies and staff rules and regulations. For any further information, please visit <u>ESO's conditions of employment</u>. Please note that the contract policy and in particular the regulations concerning fixed-term and indefinite contracts are currently under review which may lead to changes in the contractual conditions applicable to this position.



#### **Duty Station:**

Garching near Munich, Germany. Duty trips to the La Silla Paranal observatory, or temporary relocation to Chile, can be expected during commissioning of the ELT.

Career Path: V

# Application:

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

Applicants are invited to apply online at <a href="http://jobs.eso.org/">http://jobs.eso.org/</a>. Applications must be completed in English and should include a motivation letter and CV. Within your CV, please provide the names and contact details of three persons familiar with your work and willing to provide a recommendation letter upon request. Referees will not be contacted without your prior consent.

# Closing date for applications is 4 October 2020.

Interviews are expected to be held soon afterwards.

No nationality is in principle excluded however, recruitment preference will be given to nationals of Australia, Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Poland, Portugal, Spain, Sweden, Switzerland, the United Kingdom and Chile irrespective of gender, age, disability, sexual orientation, race or religion.