



## **GTCR\_09\_23 SENIOR ASTRONOMER.**

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Closing date: 12-06-2023

Gran Telescopio de Canarias S.A. (GRANTECAN) invites applications for one Astronomer position (Senior level) for its Scientific Operating Group based in La Palma (Spain), for the implementation of new observational capabilities of the Gran Telescopio Canarias (GTC).

GRANTECAN looks for people with exceptional talent and skills to operate, maintain and improve the Gran Telescopio de Canarias (GTC) executing scientific projects of the highest quality in the field of astrophysics. To this end, it requires people with integrity, responsibility, transparency, respect and honesty in their work, who seek continuous improvement, personal safety, the integrity of the facility, efficiency and innovation in their actions, as well as responsible and sustainable use, with the primary objective of caring for the environment.

### **Duties:**

The successful candidate will report hierarchically to the Head of Scientific Operations. **The main function and activity to be carried out by the successful candidate will fall within the following scientific and technical services:**

- 1) **Astronomical observations at high spatial resolution.** It consists of the implementation of the new scientific instruments that allow reaching the theoretical limit of the telescope in terms of spatial resolution, as well as the adaptation of the telescope to achieve this goals: Adaptive Optics, Laser Guide Star, GRANCAIN camera, FRIDA spectrograph, data reduction pipelines, natural ventilation of the telescope, upgrade of the GTC axes and mirror control, mirror alignment, co-phasing, closed-loop active optics, segment deformation, upgrade of the GTC Control System, and new operating tools.
- 2) **New observational capabilities with new or improved instrumentation.** Implementation of the other new scientific instruments of the GTC, or existing instruments that have been upgraded, according to the current instrumentation plan: OSIRIS+, EMIR, MIRADAS, HIPERCAM, CHORUS, their operation tools and pipelines, as well as the adaptation of the telescope and infrastructure to install and operate them.

That includes:

- Managing the post-observation support system of the GTC.
- Organising and developing an integrated system of reduction pipelines for existing scientific instruments and incorporating the pipelines associated with instrumentation under development.
- Collaborating with the Developments and Engineering Operation groups in the implementation of the telescope upgrades needed to achieve the best possible spatial resolution with the telescope.
- Participating, within the Science Operations team, in the commissioning and incorporation into the scientific operation of the instruments currently under development included in the telescope's instrumental plan.

### **(Section A) Minimum qualification required**

- PhD in Physics (MECES level 4 QF-EHEA).
- Full current driving license (level B or higher).

### **(Section B) Essential knowledge and Experience:**

- Be able to communicate effectively in Spanish.
- Be able to communicate effectively in English.

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- Have experience with night observing at optical/infrared telescopes.
- Experience in the development of astronomical data reduction pipelines in different observational modes.
- High level of programming and advanced data analysis.

**(Section C) Desirable knowledge and Experience:**

- User-level experience in the scientific operation of the GTC.
- Experience in the construction and commissioning of scientific instrumentation.
- Experience in the management of user services (ticketing).
- Outstanding track record in astrophysical research based on publications of observational work.
- Leadership, organisational skills with emphasis on adapting to change, transparency, self-organisation and collaboration with the rest of the team.

**Merits to value:**

- Section A: Candidates who do not meet these requirements will be discarded and not evaluated.
- Section B: Maximum score: 60 points. Candidates who score less than 30 points will be disqualified.
- Section C: Maximum score: 40 points

The evaluation will be based on the documentation provided by the candidate and a personal interview.

GRANTECAN is fully committed to equal opportunities and non-discriminatory recruitment. Under equal conditions in terms of merit and ability, the incorporation of personnel of the sex less represented in the professional group to which the position belongs will be prioritized.

**Contractual Information**

The selected person will sign a permanent full-time contract with GRANTECAN, subject to a trial period of 6 months. The duration of this contract will be indefinite, starting the employment relationship on the contract's start date, with the duration linked to the scientific-technical service object of the contract detailed in the "Functions" section. From a technical point of view, it is estimated that the implementation of these scientific-technical services will be completed around 2028-2029. This is in accordance with article 23 bis of Law 14/2011, of 1 June, on Science, Technology and Innovation.

The work center will be GRANTECAN's operations base in Breña Baja (La Palma), with frequent work stays at the Roque de Los Muchachos Observatory (GTC) at 2400 m altitude. Occasional work may be required at the Tenerife site in San Cristobal de La Laguna.

The gross salary will be 46.028,37€. Additional compensation will be paid for work at the Roque de los Muchachos Observatory on La Palma.

**Non-UE citizens:**

Applicants who are not citizen of a country belonging to the European Union are invited to apply for this position, but, if selected, will be allowed to sign the contract with GRANTECAN only after obtaining the compulsory documentation required to live and work in Spain.

**Applications**

Interested applicants should send their applications by **12 June 2023 at 15:00 (WEST)** to [r.personal@gtc.iac.es](mailto:r.personal@gtc.iac.es) , indicating the relevant reference number in the subject line. Applications must contain the following documents (in PDF format):

- Cover letter, describing the motivations for applying for this call.
- Application form (available on our website).
- Curriculum vitae.
- Two letters of recommendation to be sent directly from active researchers who are familiar with the candidate's previous experience.

**Late applications or those that do not include the required documents, will not be considered.** In case of incomplete applications, the applicant will have a period of three (3) days, starting from the date in which the missing documentation is required.

### **Further information**

Further information on this position is available from the GRANTECAN Head of Scientific Operations, Antonio Luis Cabrera Lavers (0034 922425720 ext 747 or e-mail [antonio.cabrera@gtc.iac.es](mailto:antonio.cabrera@gtc.iac.es)). Further information about the recruitment process is available from the GRANTECAN Head of Administration, Lourdes González Rodríguez (0034 922425720 ext. 721 or e-mail [lourdes.gonzalez@gtc.iac.es](mailto:lourdes.gonzalez@gtc.iac.es)). Further details about the GTC may be found at its web site: <http://www.gtc.iac.es>.