

Isaac Newton Group of Telescopes

Optical Engineer

Ref: LSR03_22 Closing date: 16:00 WEST 15 August 2022

The Isaac Newton Group of Telescopes (ING) invites applications for the post of Optical Engineer. We are seeking a motivated engineer who will contribute to the fine tuning, maintenance and upgrades of new ambitious facility instrumentation and will contribute to the optical maintenance of ING's telescopes and instruments.

The Optical Engineer will contribute optical knowledge and experience to a multidisciplinary engineering team responsible for the maintenance and development of ING telescopes, instrumentation and auxiliary systems. He/she will report to the Head of Engineering, and will depend hierarchically to the Head of Astronomy.

THE ING

The ING (ing.iac.es), part of the UK's Science and Technology Facilities Council (STFC, stfc.ukri.org), operates the 4.2-m William Herschel Telescope (WHT) and the 2.5-m Isaac Newton Telescope (INT) in partnership with the *Nederlandse Organisatie voor Wetenschappelijk Onderzoek* (NWO, nwo.nl) of the Netherlands, and the *Instituto de Astrofísica de Canarias* (IAC, www.iac.es) of Spain. The telescopes are located on the *Observatorio del Roque de los Muchachos*, one of the best astronomical sites in the world, at an altitude of 2400m on the island of La Palma, Spain. The telescopes are equipped with world-class imaging and spectroscopic instruments and are in operation 365 nights of the year.

In 2022 the ING is planning to commission <u>WEAVE</u>, a next-generation wide-field, multi-fibre spectroscopic facility at the prime focus of the WHT. In 2024 we foresee the deployment of HARPS3, a high-resolution stabilized spectrograph for extra-solar planet science.

DUTIES AND RESPONSIBILITIES

The successful candidate will work as part of a dedicated team managing the optical aspects of ING's instrumentation projects and providing hands-on optical support for the organisation. He/she will be involved in:

- leading the optical characterization of WEAVE components, their optimization and future upgrades
- providing optics advise on the design, manufacturing, integration and commissioning issues for new instrumentation
- identifying and correcting optics-related operational faults
- carrying out optical alignment, designing and leading the construction of alignment tools



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• maintaining optical components and, where appropriate, characterising the performance of these devices

A Job Description is available on demand.

SHORT-LISTING CRITERIA

Experience

• **Minimum**: four years in an astronomical instrumentation or operational environment

Desirable:

- Four years working with astronomical telescopes, instrumentation or in a related scientific discipline.
- A track record of involvement in the design, manufacture and testing of optical systems.

Qualifications

- Minimum: University degree in a relevant optical engineering discipline or a degree in a physics-related discipline
- **Preferred**: PhD in optical engineering, physics or related field.

Languages

- Minimum: able to communicate in English and Spanish.
- **Desirable:** fluent in English and Spanish. Ability to write complete and accurate optical documentation in English.

Specialist competencies

- Optical design; ray-tracing software
- Opto-mechanical precision measurements
- Optical systems AIV
- Optical fibre technology

Transversal competencies

- Analytical approach to solving problems
- Initiative; proactivity
- o Personal management; planning, organisation
- Good team work

CONTRACTUAL INFORMATION



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This is a permanent position, subject to a 6-month probation period. The appointment will be at grade D or E depending on the qualifications and experience of the successful candidate. The starting gross annual salary will be 37529 Euros (grade D) or 43153 Euros (grade E). After the first year the salary will rise to 39501 Euros (grade D) or 45428 Euros (grade E). The salary is subject to ~26% Spanish income tax and social-security payments.

Medical cover under the Spanish National Health Service will be available to the appointee, spouse and accompanying children. ING will assist those coming from abroad in registering with the Social Security and Health Service. A relocation package is available, and we offer financial support for Spanish lessons.

Applicants from outside the EU need to be in possession of both residence and work permits which are valid in Spain.

APPLICATIONS

The closing date for applications is 16:00 (WEST) on 15 August 2022.

To apply, please send a completed application form, available at http://www.ing.iac.es/About-ING/Vacancies/vacancies1.html by email to recruit@ing.iac.es. The form must be completed in English.

FURTHER INFORMATION

Information related to the terms and conditions of this post is available from the Head of ING's Administration, Mr Juan José Herrera (juanjo@ing.iac.es), tel: + 34 922 425 413.

Further information on the duties and ongoing projects is available from Don Abrams, Head of Engineering (don@ing.iac.es), Tel:+ 34 922 425 450.

The ING is fully committed to equality of opportunity in the workplace.