

## **EUROPEAN SPACE AGENCY**

### **Vacancy in the Directorate of Science**

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. Applications from women are encouraged.

**POST** NIRSpec Instrument & Calibration Scientist in the JWST Science Operations Team, Operations Development Division, Operations Department, [Directorate of Science](#).

This post is classified in the A2–A4 grade band on the Coordinated Organisations' salary scale.

**LOCATION** Space Telescope Science Institute, Baltimore (USA).

**DUTIES** As part of its collaboration with NASA on the James Webb Space Telescope (JWST), ESA is building up a Science Operations Team that will support the testing, commissioning and operations of the NIRSpec near-infrared spectrograph (provided by ESA) and of the MIRI mid-infrared imager and spectrograph (provided by a consortium of European institutes (EC)).

The postholder will join the ESA JWST Science Operations Team based at the Space Telescope Science Institute (STScI) in Baltimore, which is under contract with NASA to serve as the science and operations centre for JWST.

The incumbent will report to the Science Operations Development Manager of the ESA JWST Science Operations Team.

In addition to working with the ESA JWST Science Operations Team, the postholder will also work in close collaboration with the ESA JWST Project Team, the ESA JWST Project Scientist, STScI and the NASA JWST Project Team.

The main tasks during the pre-launch phase of the mission will include:

- supporting the planning and execution of the JWST ground calibration campaigns involving NIRSpec in the USA, and participating in the associated data analysis report preparation and calibration reference file generation;
- working with STScI on the definition and specification of the architecture of reference files and detailed algorithms for the NIRSpec Pipeline Data Reduction system developed by STScI;
- working with STScI on implementing and validating the NIRSpec-specific elements of the JWST ground system;
- supporting the planning of the detailed content and the execution of the NIRSpec on-orbit commissioning and calibration programme.

In addition to the above functional duties, the incumbent is expected to carry out active astronomical research, potentially in collaboration with other members of the ESA JWST Science Operations Team.

The successful candidate will be expected to take up duty at STScI no later than early 2017 in order to contribute to the final calibration campaign at the Johnson Space Flight Center and a successful commissioning phase. Duties will continue, contributing to the routine operational phase of the mission as a member of the NIRSpec support group at STScI, as part of ESA's contribution to JWST operations.

## QUALIFICATIONS

Applicants for this post should have a PhD or equivalent qualification in astronomy, physics or a related discipline. Candidates must have an established record of independent research and scientific publications in astronomy and an active research programme, preferably aligned with the scientific capabilities of JWST.

Expertise with modern astronomical data analysis software, reduction and calibration of spectroscopic data, and experience with the characterisation of IR instrumentation are essential for this post.

Expertise in multi-object and integral field spectroscopy, near-infrared detector systems and/or previous experience in the science operations of astronomical space missions are considered key additional assets.

Applicants should have excellent analytical and communication skills, and a pragmatic and proactive attitude to resolving problems. They should also have good interpersonal skills, with the ability to work effectively in an international team environment.

For behavioural competencies expected from ESA staff in general, please refer to the [ESA Competency Framework](#).

The working languages of the Agency are English and French. A good knowledge of one of these is required. Knowledge of another Member State language would be an asset.

## CLOSING DATE

The closing date for applications is **11 January 2017**.

Applications from external candidates for this post should preferably be made [online](#) from the ESA website ([www.esa.int/careers](http://www.esa.int/careers)). Those unable to apply online should submit their CV to Human Resources, ESA, 8-10 rue Mario-Nikis, 75738 Paris, Cedex 15 (France).

ESA staff members wishing to apply should fill in the [Internal Application Form](#) and email it to [Apply2HQ](#).

The Agency may require applicants to undergo selection tests.

If you require support with your application due to a disability, please email [contact.human.resources@esa.int](mailto:contact.human.resources@esa.int).

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**Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom and Canada.**

**Priority will first be given to internal candidates and secondly to external candidates from under-represented Member States.**

**In accordance with the European Space Agency's security procedures and as part of the selection process, successful candidates will be required to undergo basic screening before appointment.**