Job Posting:167530 - Position: S25 Internship -Space astronomy intern 167530

Co-op Work Term Posted: 2025 - Summer

App Deadline 03/10/2025 11:59 PM

Application Method: Through Employer Website

Posting Goes Live: 02/28/2025 04:18 PM

Job Posting Status: Approved

ORGANIZATION INFORMATION

Organization Canadian Space Agency

Country Canada

JOB POSTING INFORMATION

Placement Term 2025 - Summer

**b> Job Title ** S25 Internship -Space astronomy intern 167530

Position Type Co-op Position

Job LocationRemoteCountryCanadaDuration4 monthsWork ModeFully Remote

Salary Currency CAD

Salary Not Available, 0 Major List

Job Description

The Canadian Space Agency (CSA) is recognized worldwide for its support of the exploration of space. The CSA contributes to space observatories with other agencies including, but not limited to, the highly successful James Webb Space Telescope (JWST). One of the many ways CSA contributes to space observatories is through its support of their operations. The focus for the student in this position will be to assist with the administration and deployment of funding opportunities available to Canadian Principal Investigators and co-Investigators who have successfully proposed for observing time through Guest Observing Cycle 4 on JWST. This includes, but may not be limited to, assisting with publishing an announcement of opportunity, managing funding proposals, and issuing funding grants. Similar work will also be required for CSA's support of the X-Ray Imaging and Spectroscopy Mission (XRISM) and Canadian Principal Investigators who are awarded time during its Guest Observing Cycles 1 and 2 and for the AstroSat mission. The student will also support JWST operations by conducting technical work on its Canadian-produced Fine Guidance Sensor and Near-Infrared Imager and Slitless Spectrograph.

The CSA also operates its own small space telescope, the Near-Earth Object Surveillance Satellite (NEOSSat), that is used for astronomy and for tracking objects orbiting the Earth. Astronomy with NEOSSat mainly focusses on exoplanet transits (photometry) and asteroid tracking (astrometry). Observation time is offered to astronomers at Canadian universities through a competitive selection. The student will be closely involved in preparing the observation requests from Canadian astronomers in coordination with the CSA's Satellite Operations Center. The student will learn about the operations of this space telescope while scheduling imaging requests and will likely have opportunities to contribute to enhancing its operations and/or the data processing of downlinked and archived data.

The CSA enables the deployment of new space observatories through hardware contributions to the next generation of space astronomy missions. For instance, CSA is building critical electronics for the Atmospheric Remote-sensing Infrared Exoplanet Large-survey (Ariel), an approved mission led by the European Space Agency that is p lanned to launch in 2029 and will survey about 1000 exoplanets to study the chemistries of their atmospheres. The CSA also supports the development of ideas and technologies for space telescope concepts. This includes advancing the science requirements that go towards determining the instruments needs. The student may have the opportunity to contribute to such studies through simulations of instruments for

astronomical imaging or spectroscopy. Other, smaller projects based on the analysis of publicly available JWST and/or NEOSSat data may also be included in this internship.

Depending on the workload required for JWST, XRISM and AstroSat as primary tasks, the student may also be required to assist the Planetary Science and Space Astronomy Missions group in managing information and operational activities such as sorting reports resulting from study contracts and grants programs, using the CSA corporate information management (Livelink) system. Basic scientific and technical understanding of the context of the reports will be essential. The student may also assist in the logistics of planning and holding meetings and other administrative tasks to support group activities as required; good communicating skills are an asset.

Job Requirements

Required skills:

- Requirements:
- Programming: experience in Python
- •Shell and command processing: experience in bash or C shell
- •Operating system: experience in Windows
- •Microsoft Office: experience in Word, Excel, PowerPoint

•Assets:

- Programming: experience in Matlab, Perl
- ·Software: Anaconda, Jupyter, git
- •Data: experience in data handling, display, and analysis (e.g., Python, R)
- •Knowledge of observational astronomy and image processing techniques
- •Experience in administrative work (e.g., coordinating meetings, stakeholder engagement)
- ·Communication and organisational skills
- •Availability for a second consecutive term in Summer 2025.

Citizenship Requirement N/A

APPLICATION INFORMATION

Application Procedure Through Employer Website

Special Application Instructions

Apply for job here: Space astronomy intern

Please click the "I intend to apply to this position" button on SCOPE and also submit your application via the employer's website.

Applications are accepted on a rolling basis and the posting may be expired at any time by the employer as submissions are received.

Students should submit their applications as soon as they are ready.