Internal Research Fellow (PostDoc) in Space Environments and Effects Analyses and Modelling

Job Req ID: 12249
Closing Date: 16 April 2021
Publication: External Only
Vacancy Type: Internal Research Fellow
Date Posted: 19 March 2021

Research Fellowship Opportunity in the Directorate of Technology, Engineering and Quality.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. For this purpose, we welcome applications from all qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, age, disability or other characteristics. Applications from women are encouraged.

This post is classified F2 on the Coordinated Organisations' salary scale.

Location
ESTEC, Noordwijk, The Netherlands

Description
The ESA Space Environments and Effects Research Fellow will work on Solar Orbiter and Parker Solar Probe data for environment models, together with Spacecraft Plasma Interaction Software (SPIS) analysis for particles and charging. The planned work will include a new high-resolution model of Solar Orbiter with the latest SPIS improvements implemented for local magnetic fields, charging, particle tracing, solar array interconnects, and a new sensor model. The work will be carried out in collaboration with the main European institutes behind the Solar Orbiter mission.

Interested candidates are encouraged to visit the ESA website: www.esa.int

Field(s) of activity/research
The activities encompass space plasma environmental modelling, analysis of data from relevant existing missions (Solar Orbiter and Parker Solar Probe), and application and further development of related space plasma interactions software (SPIS) for a range of anticipated effects on the spacecraft.

Technical competencies
- Ability to conduct research autonomously
- Breadth of exposure coming from past and/or current research/activities
- Research/publication record
- Knowledge relevant to the field of research
- General interest in space and space research
- Ability to gather and share relevant information

Behavioural competencies
- Result Orientation
- Operational Efficiency
- Fostering Cooperation
- Relationship Management
- Continuous Improvement

- Forward Thinking

Education
You should have recently completed, or be close to completion of, a PhD in space science, space engineering and/or IT subjects, with preferably a background in spacecraft plasma interactions. Preference will be given to candidates awarded their doctorate within the past five years.

Additional requirements
Broader knowledge and experience in space environments and their effects on spacecraft would be an asset.

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.

Other information
For behavioural competencies expected from ESA staff in general, please refer to the ESA Competency Framework.

The Agency may require applicants to undergo selection tests.

In addition to your CV and your motivation letter, please add your proposal of no more than 5 pages outlining your proposed research in the "additional documents" field of the "application information" section.
At the Agency we value diversity and we welcome people with disabilities. Whenever possible, we seek to accommodate individuals with disabilities by providing the necessary support at the workplace. The Human Resources Department can also provide assistance during the recruitment process. If you would like to discuss this further please contact us at contact.human.resources@esa.int.

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, and the United Kingdom. Nationals from Latvia and Slovenia, as Associate Member States, or Canada as a Cooperating State, can apply as well as those from Bulgaria, Cyprus, Lithuania and Slovakia as European Cooperating States (ECS).
Priority will first be given to 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