

Job Title: Internal Research Fellow (PostDoc) in Space Environments and Effects

Req ID 2321 - Posted 20/09/2017



EUROPEAN SPACE AGENCY

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. Applications from women are encouraged.

Post

Internal Research Fellow (PostDoc) in Space Environments and Effects

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

Location

ESTEC, Noordwijk, The Netherlands

Description

The Power Systems, EMC and Space Environment Division provides project support and undertakes R&D activities within its domain of competence. This includes: space power generation, management and storage, electromagnetic and radio frequency compatibility (EMC/RFC) and space environments and their effects.

The Space Environments and Effects Section supports ESA projects with the definition and analysis of a broad range of space environments (space radiation, plasmas, atmospheres, dust, micrometeoroids, debris, etc.) and the resulting effects (radiation damage, single event effects, electrostatic charging, structural damage, etc.). In-situ measurements of environmental components, including high energy particles, quasi-neutral plasmas and particulate impacts are used to characterize the environment.

Simulation toolkits, including Spenvis, Geant4 and SPIS, are used for assessing the effects on spacecraft components and systems.

The Section also develops and validates environmental models and the necessary analysis tools, and develops space experiments for measuring the environment and effects.

Interested candidates are encouraged to visit the Section's website.

Field(s) of activities/research

In the proposed research activity, the candidate shall make use of in-situ satellite data, supported by simulation and/or theory, to create improved environment models for spacecraft design.

Technical competencies

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

Behavioural competencies

- Innovation & Creativity

Continuous Learning
Communication
Relationship Management
Self Motivation
Problem Solving
Cross-Cultural Sensitivity

Education

Applicants should have recently completed, or be close to completion of a PhD in Physics or a related technical or scientific discipline. Preference will be given to applications submitted by candidates within five years of receiving their PhD.

Additional requirements

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.

The closing date for applications is 18 October 2017.

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. Candidates are asked to arrange for 3 reference letters, to be sent by the referees themselves, before the closing date to temp.htr@esa.int. Please ensure your name is mentioned in the subject of the e-mail.

If you require support with your application due to a disability, please email 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, the United Kingdom and Canada and Slovenia as well as Bulgaria, Cyprus, Latvia, Lithuania, 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