



The Max Planck Institute for Solar System Research (MPS) conducts basic research in the field of solar and planetary physics. For ESA/NASA's current project JUICE (JUperiter ICy moons Explorer), in which the MPS is involved with the Submillimetre Wave Instrument (SWI), the institute is looking for a

## **Research Assistant / Computer Scientist**

### **Your profile**

- Graduate (diploma, master or comparable) in computer science, physics or comparable.
- Experience in establishing and managing databases for scientific applications
- Experience in dealing with XML and related query languages (e.g. XQuery, XPath)
- Experience in object-oriented programming (e.g. C++, Python)
- Experience in creating pipeline software for data reduction and data analysis
- Highly motivated, with a lot of initiative and being able to work independently.
- Good contact ability and ability to work effectively and cooperatively in an international team
- Willingness to participate in international business trips, language proficiency in English
- Knowledge of the application of astrophysical analysis software is of advantage

### **Your tasks**

- Establish, maintain and backup several databases for all scientific and engineering SWI data generated, including i) housekeeping and telemetry data, and ii) raw and calibrated data
- Contributions to the selection of the appropriate database type for the scientific data, (e.g. Berkeley DB), adapted for the SWI Science Data Model (SDM) dataset, implemented in C++ and XML schemas.
- Creating a framework for the i) data calibration software and ii) data reduction and analysis software
- Development and/or maintenance of pipeline software from telemetry-to-raw data (i.e. Level 0) and from raw-to-calibrated data (i.e. Level 1).
- The design, development, implementation and maintenance/upgrades of the SWI Instrument parameter monitoring

The position is due to be filled from August 2019. Employment is initially limited in time until July 2021, but prolongation of the position is optional. Payment is made according to TVöD (BUND) depending on qualification and work experience. As a scientific institution, the MPS ([www.mps.mpg.de](http://www.mps.mpg.de)) offers an attractive and sophisticated environment with the possibility of implementing one's own ideas and concepts. We are trying to balance gender within the division, hence encourage women to apply. The Max Planck Society is an equal opportunity employer. We strive for gender/diversity equality and welcome applications from all backgrounds.

Please send your full application to [hartogh@mps.mpg.de](mailto:hartogh@mps.mpg.de) by 15 July 2019 with reference to JUICE \_ SWI. Alternatively, applicants may send their application by post to the following address: **Dr. Paul Hartogh  
Max Planck Institute for Solar System Research, Justus-von-Liebig Weg 3, 37077 Göttingen, Germany**

For further questions call: Dr. Paul Hartogh, Phone number: +49 551-384979342