



# Max-Planck-Institut für Radioastronomie

The **Max Planck Institute for Radio Astronomy (MPIfR)** is a research institute of the Max Planck Society for the Advancement of Science. As an innovative research institution with numerous collaborations abroad, we conduct basic research in the field of astronomy. In Bad Münstereifel-Effelsberg we operate one of the largest fully steerable radio telescopes on earth. Furthermore, we maintain astronomical receiving systems at locations all over the world.

For the project "VAMPIRA" (Administration, Evaluation and Modelling of Provenance Information from Computationally Intensive Scientific Workflows) we are looking for a

## Project manager

in the area of "**Computation and Astronomical Applications**" at senior postdoctoral level and is carried out in close cooperation with the Institute for Data Sciences of the German Aerospace Center (DLR) in Jena. The project aims to design/ develop an automated analytic system that captures data provenance and thus enables reproducible workflows for data intensive analyses in radio astronomy and related fields.

### Your tasks:

- Development of concepts, methods, software, and database models for automated analysis pipelines of (radio-astronomical) measurements.
- Responsible for the organisation and the management of the project.
- You are expected to introduce the project to the astronomical community and related scientific fields and to establish new collaborations.
- There is also the possibility to develop your own research program. You will work with members of the MPIfR's "Fundamental Physics in Radio Astronomy" and "Digital Signal Processing" groups and with members of the "Data Management Technologies" group at the DLR Institute of Data Science.
- The project manager is supposed to interact very closely with both institutes involved in the project. The successful candidate therefore will be working at the Institute for Data Sciences of the German Aerospace Center (DLR) in Jena.

### We expect:

- University degree in computer science, astronomy, physics or a closely related subject
- Preference is given to candidates holding a PhD
- Profound knowledge of an object-oriented programming language (e.g. Java, C#, C++, Python)
- Profound knowledge of the database systems (preferably e.g. Neo4j, ArangoDB, or triple stores and querying languages like SQL, Cypher, SPARQL;
- Knowledge of semantic modelling, data acquisition and calibration methods in radio astronomy would be an asset
- Experience in project management would be an asset
- Ability to work in a team

- Very good organizational and communication skills
- Very good English / German language skills, both spoken and written; documentation and reporting is in German and English. Complete mastery of one of these languages is considered mandatory, mastery of both is considered an asset.
- Willingness to undertake regular business trips in Germany and abroad.

**We offer:**

- **The full-time position is available immediately.** The position is limited to two years with the possibility of a one-year extension.
- The remuneration is based on your qualifications and experience according to the TVöD (Bund).
- An additional company pension scheme (VBL).
- Training and further education opportunities
- Flexible working hours.
- A discounted public transport ticket.

The Max-Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals.

Furthermore, the Max-Planck Society seeks to increase the number of women in those areas where they are underrepresented and therefore explicitly encourages women to apply.

We look forward to receiving your complete application (including up to three reference letters) to the address:

[https://s-lotus.gwdg.de/mpg/mbra/perso/mpifr\\_bonn\\_sci\\_004.nsf/application](https://s-lotus.gwdg.de/mpg/mbra/perso/mpifr_bonn_sci_004.nsf/application)

The review starts 18th of March until the position is filled.

Further information about the MPIfR can be found at <https://www.mpifr-bonn.mpg.de>.

For further questions, please contact Dr. Hans-Rainer Klöckner via Email ([hrk@mpifrbonn.mpg.de](mailto:hrk@mpifrbonn.mpg.de)).

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