

The **Rheinische Friedrich-Wilhelms-University** of Bonn is an international research university covering a broad range of research areas. With 200 years of history, about 38.000 students, more than 6.000 members of staff and an excellent national and international reputation, the University of Bonn ranks among the most renowned universities in Germany and has been awarded with the title Excellence University.

The Physikalisches Institut and the Hochschulrechenzentrum invite applications for a fixed-term position for 3 years, with a possibility of prolongation as

Research Associate (100%) Specialized in Information Technology (IT)

The position has been created in the context of the PUNCH4NFDI consortium, which is part of the German National Research Data Infrastructure (NFDI). Its goal is the design and development of tools, methods and a platform for collaborative open science in the fields of particle (astro) physics, astronomy, nuclear and hadron physics. In Bonn the work focuses on the creation of the functional description of abstract research data objects, the metadata schemes necessary for the operation of a science data portal and the development of interfaces between the science data portal and advanced federated computing and storage facilities.

We offer:

- A diverse and challenging assignment working at the forefront of technology,
- Work in a stimulating environment with highly motivated teams and excellent opportunities to network,
- Employee-friendly workplace and working hours,
- Occupational and retirement scheme (VBL),
- A very good connection to public transport and the possibility to purchase a VRS season ticket or to use low-priced parking offers,
- Remuneration according to salary group 13 TV-L.

Your tasks:

- Contributions to the conceptual development and to the implementation of the representation of simulation or analysis workflows on the PUNCH Science Data Platform PUNCH-SDP.
- Contributions to the development and implementation of metadata schemes for the PUNCH-SDP.
- Development of the interfaces between the science data portal and federated computing and storage resources.
- Set up a federated JupyterHub service which executes notebooks using distributed computing and storage resources.
- Set up a federated storage system for local hadron physics experiments to allow for using their data for collaborative open science.

Your profile:

- Master of Science in physics, computer science or a similar field.
- Very good knowledge of the Linux operating system and IP networking.
- Familiarity with modern programming languages and software development tools.
- Experience with computational techniques used in experimental data analyses or theoretical calculations in the field of particle (astro) physics, astronomy, nuclear or hadron physics.
- Experience in the usage and operation of distributed analysis or simulation infrastructures, HPC or HTC computing is of advantage.
- Ability to cooperate and work in teams distributed over multiple sites and to contribute to the open source software development community.

The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university and has a dual-career service. It aims to increase the proportion of women in areas where women are underrepresented and to particularly facilitate their careers. Therefore, the

University of Bonn strongly encourages applications from qualified women. Applications will be handled in accordance with the State Equality Act („Landesgleichstellungsgesetz“). Applications from qualified individuals with a certified severe disability and from those of equal status are particularly welcome.

Applications for this position should include a cover letter, curriculum vitae, copy of relevant certificates, list of publications, and other relevant documents, and should be sent in a single PDF file by email to punch-application@physik.uni-bonn.de. The job offer is open until the position is filled. For further information, please send an email to punch-application@physik.uni-bonn.de.