



## Job Opening: Expert on Astrophysical Applications in High Performance Computing (f/d/m)

Leibniz Supercomputing Centre (LRZ) has been at the forefront of its field as a world-class IT service and computing centre serving Munich's top universities and colleges as well as research institutions in Bavaria, Germany and Europe for almost 60 years. As an institute of the Bavarian Academy of Sciences and Humanities, it is dedicated to providing an optimal IT infrastructure to its customers throughout the scientific community offering the complete range of IT services and technologies as well as consulting and support - from e-mail and web servers to internet access, virtual machines, cloud solutions and the Munich Scientific Network (MWN). Being home to SuperMUC-NG, the LRZ functions as one of three national HPC centres in Germany serving as the backbone for progressive research and discovery. LRZ pursues a leading role in 'Future Computing' focusing on emerging technologies, artificial intelligence and machine learning as well as quantum computing. Last but not least, the AI agency located at the LRZ is significantly driving the implementation of Bavaria's AI strategy.

We are currently looking for an

### **Expert on Astrophysical Applications in High Performance Computing (f/d/m)**

#### ***Your Key Tasks:***

- Optimize and improve key astrophysical applications for LRZ's current and upcoming leadership-class HPC systems.
- Participate in application development and porting for prospective Exascale systems.
- Keep contact with our power users and the astrophysical community and help them to track and solve their HPC problems.
- Maintain the software stack for astrophysical applications and provide user support.
- Organize and promote trainings, courses and scientific outreach activities.

#### ***Qualifications:***

- PhD or university (post) graduate degree, diploma, master's degree or equivalent in a scientifically oriented subject (astrophysics, computational sciences, mathematics, physics etc.).
- Experience with HPC applications in the field of astrophysics.
- Excellent programming skills in at least one higher-order programming language (C, C++, Fortran)
- Good programming skills in at least one scripting language (Python, Bash, R, etc.).
- Experience in Parallel Programming (MPI, OpenMP) and/or accelerator programming (CUDA, OpenACC, DPC++)
- Knowledge of HPC environments and system software, performance analysis, performance libraries and tools.
- Good oral presentation and writing skills in German or English.
- Adequate communication skills and capacity for teamwork.

We offer a multifaceted and intellectually stimulating position with flexible working hours and a family-friendly atmosphere in one of the largest and most innovative scientific data centres in Europe. You will work in a dynamic, collaborative and innovative environment characterised by an excellent working atmosphere and creative leeway. If you are interested and a topic matching your work theme can be identified, a subsequent doctoral graduation is possible.

Salary and benefits are compensated according to the collective employment agreement of the German Federal States (Tarifvertrag der Länder, TV-L). Classification is based upon qualifications and assigned duties. LRZ operates flexible work schemes. Handicapped persons will be given preference to other equally qualified applicants. As an Institute of the Bavarian Academy of Sciences, we are an equal opportunity, affirmative action employer and encourage applications

from women and men alike, regardless of their social or cultural background. We would like to point out that all personal designations in this advertisement includes every gender.

This full-time position will initially be limited to 2 years and is to be staffed immediately.

**You can count on us! Can we count on you?**

We are looking forward to receiving your complete application documents including cover letter, CV and certificates in a **single PDF file** (other file types are not accepted) via e-mail by latest **11.04.2021**:

E-Mail: [jobs@lrz.de](mailto:jobs@lrz.de)

Subject: Astrophysics (2021/21)

If you have open questions regarding this position, our colleagues are happy to answer them at the above e-mail address.

→ [Informationen über die Erhebung personenbezogener Daten](#) for information regarding the EU General Data Protection Regulation and our application procedure.

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