



Leibniz-Institut für Astrophysik Potsdam

The Leibniz Junior Group on multiphase gases in and around galaxies at the Leibniz-Institute for Astrophysics Potsdam (AIP) invites applications for a

Doctoral student position (m/f/d) in Computational Galaxy Formation

For a project on the multiphase interstellar medium and its connection to galaxy evolution. The position is anticipated to start by **March 1, 2024, but this is subject to individual arrangements**

Your tasks:

- Participation in further development of multi-phase modeling in the cosmological simulation code AREPO, a moving-mesh technique to solve the hydrodynamical equations.
- Verify code implementations in simulations of isolated galaxies
- Carry out state-of-the-art calculations in galaxy formation
- Analyze simulations, compare to observational results and publish results in peer-reviewed journals
- Present results in international conferences on the topic

Your profile:

- Master's degree in physics or astronomy or equivalent
- Thorough background in astrophysics, physics and computational methods
- Very good to excellent programming skills (e.g. C/C++ or Python)
- Good analytical and mathematical skills
- Experience with parallelization, high performance computing and/or astrophysical simulations is an advantage
- Self-motivation, creativity, flexibility and the ability to work alone and in a team

We offer:

- Salary and benefits are attractive and commensurate with those of public service organizations in Germany at 66% of the TV-L level E13.
- Flexible working hours
- Social benefits of the collective agreement for the public service (TV-L) including the company pension VBL with pension for reduced earning capacity and surviving dependents as well as a subsidy for the job ticket.
- The appointment will be for an **initial period of two years with a possible extension up to a maximum of 4 years and 1 month in total.**

To apply, please register at the AIP recruitment portal

jobs.aip.de/rec013

and follow the instructions to upload the following documents, all in PDF format: A **cover letter** motivating your application, a **Curriculum Vitae** including a list of publications (if any) and a **letter of motivation** describing your research experience, skills, and project-related work so far (no more than 3 pages including figures). Please also provide contact information for **two or more** individuals willing to provide a **reference letter** upon request. Note that we will request such letters only for a subset of applicants after an initial selection step.

For any questions on the offered position please contact Dr. Rainer Weinberger at the address below. Applications received until November 17, 2023 will receive full consideration. The AIP is an equal opportunity employer who values diversity and particularly encourages woman and other underrepresented groups to apply. Preference will be given to people with disabilities with equal competence. Application documents will be kept for at least three months after completion of the appointment process. The documents will be made available to a selection committee and to other committees and officers to be involved.

Contact for further information:

Dr. Rainer Weinberger
bewerbung-2023-09@aip.de
Leibniz-Institute for Astrophysics Potsdam (AIP)
An der Sternwarte 16
14482 Potsdam
www.aip.de

