The Leibniz Institute for Astrophysics Potsdam (AIP) invites applications for a

**Postdoctoral Research Position (m/f/d) in computational galaxy formation**

to join a newly forming Leibniz Junior group led by Dr. Rainer Weinberger. Research in this group is focused on studying galaxy formation, in particular multiphase gas in and around galaxies in a cosmological context. The group is focused on developing new numerical methods and performing large computer simulations to connect the theory of multiphase gas with existing and upcoming multi-wavelength observations.

The successful applicant will have access to a recently developed 2-fluid method implemented in the Arepo code and will lead the development of next generation sub-resolution models for cosmological galaxy formation simulations. These models will then be deployed to large-scale cosmological simulations. The successful applicant will also have time to pursue their own research projects broadly related to the theory of multi-phase gases in galaxies such as e.g., the interstellar or circum-galactic medium or multiphase galactic outflows.

**Qualifications**
Candidates with experience in theoretical and computational astrophysics and an interest (though not necessarily experience) in multiphase media are encouraged to apply. Applicants need to have a PhD in astronomy, physics, or a closely related field by the beginning of the appointment.

**Salary and benefits**
Salary and benefits are attractive and commensurate with those of public service organizations in Germany at the TV-L level E13, depending on the requirements of the collective agreement (professional experience and expertise), as well as the social benefits of the collective agreement for the public service (TV-L) incl. 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 of up to a maximum of 5 years in total). The position is anticipated to start in fall 2023, but this is subject to individual arrangements.

**Application**
To apply, please register at the AIP recruitment portal

[https://jobs.aip.de/rec006](https://jobs.aip.de/rec006)

and follow the instructions to upload the following documents, all in PDF format: a cover letter motivating your application, your curriculum vitae, a list of publications, a plan of future research (max. 3 pages) and past accomplishments (max. 2 pages), and the names of three individuals willing to provide reference letters upon request.

Applications received before November 30, 2022 will receive full consideration.
In case of questions please contact Rainer Weinberger at the following email address: rainer@cita.utoronto.ca

AIP offers flexible working hours and a cooperative working atmosphere. Equal opportunity is an integral part of personnel and organizational development at the AIP, and applications from scientists of all genders are encouraged. People with disabilities will be given preferential consideration if they are equally qualified and capable. The AIP values and promotes a respectful and tolerant working atmosphere, and has adopted a Code of Conduct. Your application documents will be kept for at least three months after completion of the appointment process. As a rule, your documents will be made available to a selection committee and to the committees and officers to be involved in the appointment process.

The AIP continues the tradition of the Astrophysical Observatory Potsdam and the Berlin Observatory. It is located in the beautiful Potsdam/Babelsberg area, at the South-western border of the Berlin metropolitan area. About 150 scientists work on a variety of astrophysical topics covering the full range from solar physics to cosmology. The AIP features excellent HPC supercomputing facilities and has access to national supercomputers. Potsdam is also the home of the Max Planck Institute for Gravitational Physics and the Institute for Physics & Astronomy of Potsdam University.

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