



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

*post-doctoral researcher (m/f/d) in the area of protoplanetary discs*

joining an ERC-funded research project at the MHD and Turbulence Section.

**Advertised Position / Requirements** – We are seeking for a highly motivated, talented individual, who will be part of an ERC-funded research project at the interface of *theoretical astrophysics*, astrochemistry and (sub-)mm/IR astronomy. Motivated by understanding the environments in which planets form, the ambitious research project encompasses theoretical, numerical and observational aspects of accretion physics in the context of poorly ionised and, at the same time, *self-gravitating* protoplanetary discs.

Candidates with overlapping interests in the areas of astrophysical fluid dynamics (notably including the effect of gas self-gravity) and MHD / dynamo theory, are particularly encouraged to apply. Existing skills in high performance computing, using state-of-the-art numerical codes in conventional or GPU-accelerated architectures, will be considered valuable assets. This also entails the development and testing of advanced numerical tools, as well as designing, planning, and executing numerical campaigns (including applying for external CPU/GPU time at German and European HPC centres).

The position is available for initially two years; an extension to *three years* is foreseen as the default option, but will nevertheless be subject to the individual's satisfactory performance. Applicants are required to hold a PhD degree in astrophysics, and should have demonstrated an independent approach to identifying and tackling relevant scientific questions in their subject area. A solid foundation of astrophysics in general, as well as good English skills (written and spoken) are essential. An existing background in the research area of star formation / protoplanetary disks will be considered advantageous. The salary will be based on the German public service collective agreement at the pay grade TV-L E13, with the seniority level determined by an assessment of the applicant's prior work experience. Ample project funding for work-related travel is available, as well as dedicated local computing resources. Employer contributions to medical and dental insurance, parental leave, and retirement benefits are included. The nominal starting date is November 2023, but individual arrangements will be possible.

**Your Application** – To apply, please submit the following documents, concatenated into a single PDF document: **1)** a Cover Letter (1 page) motivating your application, **2)** a Curriculum Vitae along with a list of publications & talks, **3)** a Research Summary of your past achievements ( $\leq 3$  pages), and **4)** a Research and Career Development Statement ( $\leq 2$  pages), via e-Mail to **<bewerbung-2022-21@aip.de>**.

Please also provide contact information for up to three individuals willing to provide **reference letters** upon request. Note that we will request such letters only for a subset of applicants after an initial selection step. Applications that are submitted until **December 16, 2022** will receive full consideration. The AIP is an equal opportunities employer, who values diversity and particularly encourages women and other underrepresented groups to apply. People with disabilities will be given preferential consideration if they are equally qualified and skilled. Application documents will be kept for at least three months after completion of the appointment process. The documents will per default be made available to a selection committee and to other committees and officers to be involved.

**The Host Institution** – The Leibniz Institute for Astrophysics Potsdam (AIP) has about 200 employees and is dedicated to astrophysical research questions ranging from the exploration of our Sun to the evolution of the universe as a whole. Key aspects are cosmic magnetic fields and extragalactic astrophysics,

supplemented by the development of research technology in the fields of spectroscopy, robotic telescopes, and e-science. The institute is located in the beautiful Potsdam/Babelsberg area, at the South-western perimeter of the Berlin metropolitan area. The AIP continues the tradition of the Astrophysical Observatory Potsdam and the Berlin Observatory (founded in 1700 AD). Potsdam is also the home of the Albert-Einstein Institute for Gravitational Physics, the Physics and Astronomy Department at the University of Potsdam, and several other research institutions. The AIP offers an open-minded and cooperative working atmosphere in a modern and very well equipped working environment. All institute members and guests agree to comply with the Code of Conduct. The AIP promotes gender equality and invites all institute members to engage by promoting equality and diversity.

**Contact** – Please feel free to direct any informal inquiries or questions about the advertised position (as well as the context of the research programme) directly to Dr. Oliver Gressel <[ogressel@aip.de](mailto:ogressel@aip.de)>, who is in charge of the ERC-funded project and oversees the application process. For sending your final application, please then use the dedicated e-mail address listed above.

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