



Leibniz-Institut für Astrophysik Potsdam

The Leibniz Institute for Astrophysics Potsdam (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.

Subject to the final decision on the availability of funds, the AIP invites applications for a

PhD student position (m/f/other)

in the *Magnetohydrodynamics and Turbulence* group at the AIP, as part of the DFG research unit FOR 2634/2 on transition disks. The project runs over a duration of 36 months, and while primarily supervised by Dr. Oliver Gressel at AIP, the framework of the research unit will provide ample opportunity for close collaboration with the group of Prof. Barbara Ercolano at LMU Munich.

Your tasks:

- Study the dynamical evolution of protoplanetary disks by means of MHD simulations including outflows driven simultaneously by photoevaporation and magnetocentrifugal disk winds.
- Derive predictive synthetic spectra and velocity maps for comparison with observations.
- Engage in the development of the simulation scenario by a) extending the model to the case of a central suppression of the surface density, and b) the formation of a planetary gap.

Your profile:

- Applicants should hold a MSc degree or equivalent in astrophysics or a related discipline at the time of starting the position.
- Previous experience in the field of fluid dynamics or MHD, and/or a background in protoplanetary disk physics and/or chemistry will be considered a strong asset.
- Ideally, you are already equipped with a skillset covering basic scientific programming, as well as running and analysing high-performance computer simulations.

The salary is based on the German public service scale (65% TV-L E13), including employer contributions to medical and dental insurance, parental leave, and retirement benefits. The AIP is an equal opportunity employer, who values diversity and especially encourages women and other underrepresented groups to apply. For informal inquiries about the position, please contact <ogressel@aip.de> directly.

To apply, please send a single PDF containing a cover letter, your curriculum vitae, master degree certificate (or equivalent), a link to your master thesis, and a brief research statement (max. 2 pages) to <bewerbung_2020-23@aip.de>, and arrange for two reference letters to be sent to the same address. Applications sent before January 15, 2021 will receive full consideration, later submissions will be considered until the position is filled.

Contact:

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