

Scientists at the Leibniz Institute for Astrophysics Potsdam (AIP) work on a variety of astrophysical topics covering the full range from solar physics to cosmology. Key aspects are cosmic magnetic fields and extragalactic astrophysics supported by a large technology team on spectroscopy, robotics, and e-science. The AIP is located in the beautiful Potsdam/Babelsberg area, at the South-western border of the Berlin metropolitan area. It continues the tradition of the Astrophysical Observatory Potsdam and the Berlin Observatory (founded in 1700) and has more than 200 employees.

Applications are invited for two

## PhD positions (m/f/d) in stellar-exoplanetary science

in the research group of Prof. Dr. Katja Poppenhäger at the Leibniz Institute for Astrophysics Potsdam (AIP).

The research topic for these positions is the atmospheric mass loss and high-energy environment of exoplanets.

**PhD position 1** is observationally oriented and will deal with an analysis of X-ray spectra of exoplanet host stars. A particular focus will be set on the reconstruction of the extreme-UV spectra of such stars from their observed X-ray properties, which in turn strongly influences the observable evaporation of their exoplanets. For this position experience in X-ray data analysis is desirable, but not required.

**PhD position 2** is simulation-oriented and will deal with numerical modelling of evaporating exoplanet atmospheres and their transmission spectra. This work will be informed by the stellar spectra analysed in PhD position 1. For this position experience in numerical work in an exoplanet-relevant context is highly desirable.

The successful applicants will be embedded in a lively and diverse research group that investigates a mix of stellar and exoplanetary research topics. The contract duration for each position is four years. The start date is negotiable, but expected to be in the timeframe from summer 2025 to winter of 2025/2026. The positions will include generous travel support. The successful candidates must have a Master's degree or equivalent in Physics, Astronomy, or a related field at the time of starting the position. If you have not obtained your Master's degree yet, please submit relevant information as to when your degree completion can be expected. Salary and benefits are based on the collective agreement for civil service employees of the Federal States, at 66% of a TV-L E13 full-time position. The positions also provide social benefits including health insurance, pension contributions, parental leave as well as a subsidy for a so-called "job ticket" (i.e. for commuters).

To apply for these positions, please submit a **cover letter** explaining your motivation and which of the positions you wish to be considered for, a **curriculum vitae**, a two-page **description of your previous research** work, a copy of your Master's **degree** (if completed) and a **transcript** of grades, plus the names and contact details of two potential **reference letter writers**. It is not required to submit letters of reference at this stage. Letter writers will be contacted at a later stage in the selection process. Please use the AIP Job Application Portal to submit your application: <a href="https://jobs.aip.de/rec022">https://jobs.aip.de/rec022</a>

We particularly value diversity and we encourage applications from women. People with disabilities will be given preferential consideration if they are equally qualified. The AIP values and promotes a respectful and tolerant working atmosphere and has adopted a Code of Conduct to that end. Your application documents will be kept for at least three months after completion of the appointment process.

Applications received by Jan. 31 2025 will receive full consideration.

In case of questions about the scientific context, please contact Prof. Poppenhäger at: bewerbung-2024-15@aip.de.

For procedural questions, please contact Prof. Poppenhäger's assistant Katrin Böhrs at: kboehrs@aip.de



