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UNIVERSITÄT  
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## Postdoctoral Researcher in Exoplanet Atmospheres at University of Bern and Lund University

The University of Bern and Lund University invite applications for a Postdoctoral Researcher to work in the groups of Daniel Kitzmann (Bern) and Jens Hoeijmakers (Lund) on exoplanet atmospheres. The group of Daniel Kitzmann focusses on the development of new radiative transfer and chemistry models to interpret observations of exoplanet atmospheres, including high-resolution ground-based spectroscopy and JWST. The group of Jens Hoeijmakers focusses on carrying out observations of exoplanet atmospheres, especially high-resolution ground-based spectroscopy of ultra-hot Jupiters. The two groups work together to enable faster, more efficient and more robust interpretations of new and upcoming observations of the atmospheres of hot gas giants as well as smaller, cooler exoplanets.

As part of the project, a separate 3-year postdoc position in Lund is currently being advertised as well, with another 3-year position in Bern to be advertised later next year.

### Job description

This position is a shared 2+2-year appointment at Lund and Bern. The first two years of this position will be spent with Daniel Kitzmann at the University of Bern, while during the second half the postdoc will work with Jens Hoeijmakers at Lund University.

Depending on the qualification and aspirations of the candidate, the scientific work of this position can include all the topics covered in the project, such as atmospheric retrievals, theory and modelling as well as observations and the corresponding data reductions. Since this is a shared position, it is envisaged that the postdoctoral researcher will aim to link the research areas of the two involved groups over the course of the four years. While contributing to the overarching goals of the project, the candidate will also be able to carry out their own independent research.

The starting date is flexible within spring/summer 2025. Employment conditions follow the standards of the University of Bern and the SNSF for postdoctoral researchers (salary starting at 90 kCHF/year).

### Requirements

Applicants must have a PhD in Astronomy, Astrophysics, Physics, or a closely related field by the start of the position. Experience in exoplanet atmospheres theory/modelling or observations, especially with respect to high-resolution spectroscopy is strongly desired. Previous experience in carrying out observations of exoplanets or spectroscopic observations as well as a proven record in obtaining funding or telescope time will be considered an asset. We expect a strong expertise and experience in programming with high-level programming languages (e.g., Python or C++). A proven track record in code and model development and knowledge in high-performance computing will be a strong asset. The successful applicant must have the ability to carry out an independent research

program and also work collaboratively with students and other researchers located in Lund and Bern.

### **How to apply**

Please submit a cover letter (max 1 page), a personal research statement describing the relevant experience (max 2 pages), a proposed research project plan containing a clear vision for the candidate's future research in connection with the project (max 2 pages), the CV & publication record, and a copy of the PhD degree certificate **as a single PDF file** to [daniel.kitzmann@unibe.ch](mailto:daniel.kitzmann@unibe.ch).

In the cover letter please list at least two contacts that can provide letters of reference. Reference letters will not be requested and will not be assessed during the initial review of the applications. The reference persons provided in the application may only be contacted for candidates who are invited for an interview.

The **deadline for applications is 20 December 2024**. Applications not respecting these guidelines will not be considered.

The University of Bern and Lund University are committed to diversity and inclusivity and encourage applications from candidates of all backgrounds.

### **Inquiries**

For further information please contact Daniel Kitzmann ([daniel.kitzmann@unibe.ch](mailto:daniel.kitzmann@unibe.ch)) and/or Jens Hoeijmakers ([jens.hoeijmakers@fysik.lu.se](mailto:jens.hoeijmakers@fysik.lu.se)).