



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. The innovation center innoFSPEC headquartered at AIP is a joint project between the University of Potsdam and AIP. While AIP has a strong record in the development of optical instrumentation for state-of-the-art international observatories (e.g. ESO, LBT, HET, CAHA), innoFSPEC Potsdam provides a unique opportunity for research in fundamental astronomy & astrophysics utilizing instruments such as MUSE, PMAS etc., as well as, on key enabling technologies, in the field of Astrophotonic instrumentation for modern telescopes and facilities, e.g. the ELT, VLTI, CAHA, etc. Under the BMBF funded project Astrophotonics, innoFSPEC invites applications for

Postdoctoral Position (m/f/d) in Frequency Combs for Astronomy

to undertake research and development of VIS and NIR frequency combs for astronomy. Specifically, we are currently developing a turn-key frequency comb system for installation at an observatory operated by AIP. The framework of the research will provide ample experience working at observatories in Calar Alto, Tenerife and Paranal, during the on-sky tests of the frequency comb.

Your Tasks

- Development, assembly, and delivery of VIS and NIR frequency comb prototype for on-sky demonstration
- Mathematical modeling and simulation of four-wave mixing processes
- Contribute to peer-reviewed publications, patents, and conference papers.

Your Profile

- PhD in astronomy, astrophysics, instrumentation, or in related fields
- Experience with instrumentation for NIR astronomy, specifically frequency combs
- Knowledge of at least one scientific programming language: Python, MATLAB, or IDL.
- A track record of scientific publications in peer-reviewed journals
- Excellent interpersonal and communication skill and ability to work as a member of a team.
- Competent to submit proposals to funding agencies e.g., DFG, BMBF, H2020, ERC.
- Working proficiency in the English language. Basic German skills will be an advantage.

The AIP is an equal opportunity employer and strives to maintain a diverse, inclusive work environment and culture. AIP particularly encourages applications from women and those from diverse backgrounds. Preference will also be given to people with disabilities with equal competence. The appointment could start immediately after the recruitment process is completed. Salary and social benefits are calculated based on qualifications and the German public service scale TV-L (upto & including E14). Employer contributions to medical, parental leave, and retirement benefits are included. To apply please send your CV, publication list, copies of academic degrees, and a brief research plan to: bewerbung_2021-03@aip.de. Review of applications will begin immediately & continued until the position is filled.

Contact

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