



Postdoctoral Position for BlueMUSE

Overview

The innovation center innoFSPEC Potsdam is a joint project between the University of Potsdam and the Leibniz-Institute for Astrophysics Potsdam (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 on key enabling technologies and application studies for instrumentation at modern telescopes. The innoFSPEC group „Multichannel Spectroscopy“ solicits applications for a postdoc position concerned with the development of BlueMUSE, a third generation instrument planned for the ESO-VLT. At the current stage, the main tasks consist in the further development of the science case and top-level requirements, simulations of datacubes, performance estimates, and the development of requirements for the calibration subsystem.

Your Tasks

- Creation of mock datacubes for resolved stellar populations in nearby galaxies.
- Simulation and analysis of science observations based on the optical model and existing data, with emphasis on resolved stellar populations, specifically massive stars.
- Analysis of the existing MUSE pipeline, deriving requirements for BlueMUSE.
- Investigation of systematic effects arising in the UV and blue wavelength ranges, e.g. instrumental scattered light, detector properties, atmospheric dispersion, etc.

Your Profile

- PhD degree in astronomy.
- Demonstrated experience in observational stellar astrophysics.
- A strong background in IFU observations, data reduction, analysis, and interpretation.
- Knowledge in PSF-fitting techniques for IFUs and applications for crowded fields is an asset.
- Excellent interpersonal and communication skills and ability to work as a member of a team.

Conditions

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. The appointment would be for 3 years. Salary and social benefits are calculated based on the German public service scale TV-L and depends on qualification. Employer contributions to medical, parental leave, and retirement benefits are included. To apply, please send until June 24, 2020, your CV, and publication list to: bewerbung_2020-15@aip.de

Contact

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