

The Cosmology and Astroparticle Physics Group has the following job opening:

Research position (m/f/d) (PhD student) in the field of cosmology



ID: **Wiss25513**

- Start: as soon as possible
- part-time 65 %
- salary depending on personal qualification up to Remuneration level 13 TV-L
- fixed-term

The Cosmology and Astroparticle Physics group investigates the formation and evolution of large-scale structures in the Universe, the nature of dark matter, dark energy and the physics of the early universe. We use theoretical, statistical and numerical tools in combination with observational data from optical and radio surveys such as Euclid, Rubin LSST and SKA.

Your Tasks

The PhD project focuses on galaxy clustering and weak lensing probed by galaxy and radio surveys such as Euclid and SKA. You will work on developing methods to extract cosmological and astrophysical parameters from beyond two-point statistics. You will incorporate new physical effects into existing theoretical methods and include systematics relevant for observational data, validate predictions with simulated data and perform data analysis of mock and real galaxy survey data. You will conduct research independently and in collaboration with small international teams and large collaborations, and present your results in scientific publications and meetings. (78%)

The supervision of exercise groups (tutorials) and the support of Master and Bachelor students in the research group is also part of the tasks (the teaching load is 2.6 hours per week). (22%)

Your Profile

We expect

- completed scientific university degree in physics, astronomy or equivalent, alternative: completed scientific university degree (e. g. Bachelor's degree) and advanced scientific university degree (e. g. Master's degree) in physics, astronomy or equivalent
- good command of written and spoken English
- ability to work in a team
- self-motivation
- documented knowledge of cosmology
- experience in programming (Python, C++, etc.)

Preferred experience and skills

- experience with data analysis
- knowledge of the large-scale structure and statistics for galaxy clustering and/or weak lensing

The employment is conducive to academic qualification, and opportunities for academic (further) qualification are provided.

We offer

- salary depending on personal qualification up to Remuneration level 13 TV-L
- fixed-term (3 years) (§ 2 (1) sentence 1 of the WissZeitVG; in accordance with the provisions of the WissZeitVG and the Agreement on Satisfactory Conditions of Employment, the length of contract may differ in individual cases)
- part-time 65 %
- internal and external training opportunities
- variety of health, consulting and prevention services
- reconcilability of family and work
- flexible working hours
- good transport connection
- collegial working environment
- open and pleasant working atmosphere
- exciting, varied tasks

Application Procedure

We are looking forward to receiving your application with a 1-page cover letter, curriculum vitae, Abstract of the Master's thesis, transcript of academic achievements, certificates and two letters of recommendation. To apply, please preferably use our online form via the application button below.

application deadline: 25.01.2026

APPLY NOW

Contact

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Bielefeld University has received a number of awards for its achievements as an equal-opportunity employer and has been recognized as a family-friendly university. The university welcomes applications from women. This is particularly true with regard both to academic and technical posts as well as positions in information technology as well as the skilled crafts and trades. Applications are handled according to the provisions of the state statutes on equal opportunity. Applications from suitably qualified handicapped and severely handicapped persons are explicitly encouraged.

At Bielefeld University on request positions can be carried out with reduced working hours as long as this does not conflict with official needs.

