



The Faculty of Physics offers a part-time

# research position

starting on the 1st of May, 2018

(E13 TV-L, non-permanent position)

#### **Your Tasks**

This position for a doctoral student is part of the Research Training Group "Models of Gravity", RTG 1620 (Bielefeld, Bremen, Hannover, Oldenburg and Copenhagen), funded by Deutsche Forschungsgemeinschaft (DFG). The position will be located in the Cosmology and Astro-Particle Physics group at Bielefeld University. The RTG 1620 aims at improving our understanding of general relativity and alternative models of gravity. This includes the comparison of theoretical predictions with astronomical observations. The successful applicant will be expected to study the evolution of cosmological large-scale structure in the context various models of gravity and the test of those models with help of the LOFAR Two-metre Sky Survey (LoTSS) radio galaxy catalogue.

The tasks of the position include:

- cosmological analysis of the LoTSS-catalogue (40 %)
- theoretical predictions of the large-scale structure as expected to be seen in the LoTSS-catalogue (35 %)
- teaching activities (25 %)

Obtaining a doctoral degree will be supported.

## Your Profile

- master's degree or comparable (e. g. Master of Science) in physics, mathematics or any other relevant discipline
- good knowledge of English (at least comparable to level B2)
- willingness to travel extensively between the collaborating institutes and to selected conferences and workshops
- high communication skills
- cooperative and team-oriented working method
- strong organization and coordination skills

#### Preferable qualifications

- basic knowledge of cosmology and general relativity
- experience with the analysis of radio-galaxy catalogues
- programming skills (e.g. Python or C/C++)
- knowledge of LaTeX
- knowledge of Unix/Linux

#### Remuneration

Salary will be paid according to Remuneration level 13 of the Wage Agreement for Public Service in the Federal States (TV-L). As stipulated in § 2 (1) sentence 1 of the WissZeitVG (fixed-term employment), the contract will end after three years. 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. The employment is designed to encourage further academic qualification. The position is advertised as a 66 % part-time job. In individual cases, this percentage may be reduced on request, as long as this does not conflict with official needs.

Bielefeld University is particularly committed to equal opportunities and the career development of its employees. It offers attractive internal and external training and further training programmes. Employees have the opportunity to use a variety of health, counselling, and prevention programmes. Bielefeld University places great importance on a workfamily balance for all its employees.

#### **Application procedure**

For full consideration, your application should be preferentially received via email (a single PDF document) sent to secretariat@models-of-gravity.org by the 8th of March 2018. Your application should contain a letter of motivation, a CV, a summary of your master thesis and you should arrange for two letters of reference sent independently. Please mark your application with the identification code: wiss18042. Please do not use application portfolios and send only photocopies of original documents because all application materials will be destroyed at the end of the selection procedure. Further information on Bielefeld University can be found on our homepage at <a href="www.uni-bielefeld.de">www.uni-bielefeld.de</a>.

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Bielefeld University has received a number of awards for its achievements in the provision of equal opportunity 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 and Trades and Craft. Applications are handled according to the provisions of the state equal opportunity statutes. Applications from suitably qualified handicapped and severely handicapped persons are explicitly encouraged.

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