



The Faculty of Physics offers a full-time

## research position for programming

starting at March 1st, 2018

(E 13 TV-L, non-permanent position)

### Your Tasks

The radio astronomy group at Bielefeld University is looking for an astronomically-minded computer scientist for solarwind studies. The successful applicant will work as a key member of the Bielefeld University pulsar group on the Horizon 2020-funded "LOFAR for Space Weather" project, together with an international team led by ASTRON, the Dutch radio astronomy institute. The applicant's work will focus on investigating novel methods to study the solar wind and its magnetic field; and will help in efforts to develop an observing system and analysis pipeline for a potential future low-frequency solar observatory.

In detail this means:

- comparison of analysis pipelines codes/ methods for pulsar-based solar wind studies (25 %)
- development and optimisation of analysis pipelines for pulsar-based solar wind studies (25 %)
- data management and archiving (15 %)
- documentation (10 %)
- analysis of scientific test data as input to science case definition (10 %)
- development of telescope control and scheduling software (10 %)
- active participation in consortium meetings and telecons (5 %)

### Applicant's profile

#### We expect

- an academic degree (MSc / diploma) in computer science
- experience with Linux/Unix systems and shell-scripting
- good knowledge of the English language (at least comparable to level B2)
- ability to work independently and as part of a team
- good communication skills and comfort in international research groups
- willingness to travel to international consortium meetings
- interest in astronomy
- interest in computing

### Preferable qualifications

- experience with pulsar data analysis
- knowledge of radio astronomy techniques
- expertise in programming languages (Python, C/C++)
- experience with heliospheric studies

### 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, the contract will end on 28<sup>th</sup> of February 2021. 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. In principle, the full-time position may be changed into part-time position, as long as this does not conflict with official requirements.

Bielefeld University is particularly committed to the career development and equal opportunities 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 work-family balance for all its employees.

#### Application

For full consideration, your application (submitted in English only) should be received via either post or email (a single PDF document) sent to an [rededer@physik.uni-bielefeld.de](mailto:rededer@physik.uni-bielefeld.de) by the **4<sup>th</sup> of January 2018**. Please mark your application with the identification code **wiss17342**. 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 about Bielefeld University can be found on our homepage at [www.uni-bielefeld.de](http://www.uni-bielefeld.de).

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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.

*Die Universität Bielefeld ist für ihre Erfolge in der Gleichstellung mehrfach ausgezeichnet und als familiengerechte Hochschule zertifiziert. Sie freut sich über Bewerbungen von Frauen. Dies gilt in besonderem Maße im wissenschaftlichen Bereich sowie in Technik, IT und Handwerk. Bewerbungen geeigneter schwerbehinderter und ihnen gleichgestellten behinderten Menschen sind ausdrücklich erwünscht.*

