The Faculty of Physics offers a full-time research position starting as soon as possible (latest April 1st, 2019)

(E13 TV-L) (non-permanent position)

Your Tasks

The postgraduate fellowships are funded by the European Union H2020 programme through the European network for Particle physics, Lattice field theory and Extreme computing (EuroPLEx), the recently approved Marie Skłodowska-Curie Innovative Training Network (MSCA-ITN). The Europlex network involves leading European Lattice Field Theory groups based at the following institutions: (Denmark) Syddansk University, (Germany) University of Bielefeld, University of Regensburg, Humboldt University Berlin, (Ireland) Trinity College Dublin, (Italy) University of Parma, (Spain) Autonomous University Madrid (UAM), (UK) University of Edinburgh and Swinburne University. The research performed within the network aims to:

- perform precision tests of the Standard Model
- investigate beyond the Standard Model candidate theories
- probe the QCD phase diagram
- non-perturbatively study theoretical aspects of Quantum Field Theories

The research provides a solid training in the analytical skills needed in quantum field theory and in particle physics phenomenology, as well as in high performance computing and in software development. The research project foreseen for this position involves the following tasks:

- numerical calculations of conserved charge fluctuations in lattice regularized Quantum Chromodynamics (85 %)
- detailed comparison with recent heavy ion experiments at the Large Hadron Collider in Switzerland and the Relativistic Heavy Ion Collider in the US (15 %)

As the position is third-party-funded, the following requirements have to be met:

Candidates are expected to have a Master's degree in Physics or related areas at the time of the commencement of employment. They must not have resided or carried out their main activity (work, studies, etc.) in the country of the recruiting beneficiary for more than 12 months in the 3 years immediately before the recruitment date. Compulsory national service and or short stays such as holidays and time spent on the procedure for obtaining refugee status under the Geneva Convention are not taken into account. Candidates must, at the date of recruitment by the beneficiary, be in the first four years (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree. Full-Time Equivalent Research Experience is measured from the date when the researcher obtained the degree entitling him/her to embark on a doctorate (in the country in which the degree was obtained or in the country in which the researcher is recruited, even if a doctorate was never started or envisaged).


Your Profile

We expect

- Master's degree or comparable in physics, mathematics or any other related discipline
- fluent knowledge of English (at least comparable to level B2)
- to be willing to travel extensively between the collaborating institutes and to selected conferences and workshops
- good written and oral presentation skills
- learn-oriented

Preferable qualifications

- experiences with numerical calculations in lattice QCD at finite temperature
- basic knowledge of heavy ion phenomenology
- 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) sentences 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. In principle, these full-time position may be changed into a part-time position, as long as this does not conflict with official needs.

Bielefeld University is particularly committed to 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 work-family balance for all its employees.

Application Procedure

For full consideration, your complete application (CV, description of research interests, list of publications, two letters of recommendation) should be received by either email or as a single PDF document sent to schmidt@physik.uni-bielefeld.de by the 24th of January 2019. Please mark your application with the identification code: wiss18341. Please do not send original documents 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 www.uni-bielefeld.de.

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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.