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UNIVERSITÄT
BERN

AEC
ALBERT EINSTEIN CENTER
FOR FUNDAMENTAL PHYSICS



The *Albert Einstein Center for Fundamental Physics* (AEC) and the *Laboratory for High Energy Physics* (LHEP) at the University of Bern invite applications for

**Two Ph.D. Student Positions in Particle Physics with Neutrons
concerning the n2EDM and the Q-Neutron Experiments**

Our research group, the *Fundamental Neutron Physics Group*, is working in the field of experimental low energy particle physics. We develop novel methods and perform high-precision neutron physics experiments. The group is active in several exciting state-of-the-art projects. Firstly, the search for a neutron electric dipole moment using ultracold neutrons within the nEDM collaboration based at the Paul Scherrer Institute in Switzerland. Secondly, the investigation of a new interferometric method with the goal to measure the electric charge of the neutron. Ultimately, the latter experiment is intended for the upcoming European Spallation Source in Sweden.

The successful candidates will be involved in all aspects of the experiment, e.g. design and test of experimental components, data acquisition, simulations, conducting neutron experiments during beam times, and data analysis. They will be able to learn and experience a broad range of (particle) physics techniques and skills. The positions will be located in Bern, however, experiments will also be performed at the spallation and ultracold neutron sources at the Paul Scherrer Institute and other international research facilities.

We are looking for highly skilled and enthusiastic researchers who enjoy working in these quickly emerging projects. You should hold a master's in physics and ideally have experience in experimental physics from internships and/or your master's project. You are a team-oriented and communicative person and act independently, show initiative and are practice-oriented. Good knowledge of English (written and oral) is mandatory; knowledge of German is a plus.

Candidates are requested to send a short letter of motivation, their CV, and names and contact information of references to the email address given below.

The positions are open starting from February 1st 2019. The review of applications will continue until the positions are filled.

For further information, please contact:

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