The Research Unit "The Epistemology of the LHC", funded by the German Research Foundation (DFG) and the Austrian Science Fund (FWF), invites applications for

2 Postdoctoral and 5 Doctoral positions in the fields of philosophy of science, history of science, social studies of science, and physics.

Established in 2016, the Research Unit has forged a unique cooperation between physicists, philosophers, historians, and social scientists. Its aim is to collectively investigate the epistemology of the Large Hadron Collider (LHC) at CERN. With its six individual projects cooperating closely and its teams located at universities across Germany and Austria, the Research Unit covers a broad variety of issues concerning the forefront of research on experimental and theoretical physics at one of the largest scientific facilities worldwide. It addresses key questions in philosophy, history, and the social sciences from an interdisciplinary perspective.

After a successful first phase, the Research Unit has been extended for a second phase of 36 months. We would like to fill the following positions:

Project (A1) "The formation and development of the concept of virtual particles":

- 1 postdoctoral position at the RWTH Aachen University.

Project (A2) "The hierarchy, fine tuning, and naturalness problem from a philosophical perspective":

- 1 position for a doctoral researcher at the University of Wuppertal.

Project (A3) "LHC and gravity":

- 1 position for a doctoral researcher at the University of Bonn and the RWTH Aachen University.

Project (B1) "The impact of computer simulations and machine learning on the epistemic status of LHC data":

- 1 position for a doctoral researcher at the KIT (Karlsruhe).

Project (B2) "Model building and dynamics":

- 1 position for a doctoral researcher at the University of Bonn.

Project (B3) "Producing novelty and securing credibility in LHC experiments":

- 1 position for a doctoral researcher at the University of Klagenfurt (Austria).
- 1 postdoctoral position at the University of Klagenfurt (Austria).

Each project is directed jointly by a principal investigator from physics and investigators from the philosophy of science, history of science, or social studies of science (STS).

We are looking for candidates from the aforementioned fields who are interested in engaging in interdisciplinary work and who have experience in one or more of the relevant fields of expertise. We are committed to diversity and equal opportunity, and would like to encourage applications from scholars who would diversify the Research Unit, and the academic community more generally.

Positions are funded for three years and will typically start on May 1, 2020.

Deadline for applications: January 31, 2020.

Descriptions of the individual projects can be found at

http://www.lhc-epistemologie.uni-wuppertal.de.

Please send applications electronically to lhc.epistemology@uni-wuppertal.de.

Applications should include a letter of motivation with a ranked list of the project(s) (A1-A3, B1-B3) applied for, a curriculum vitae, a list of publications and presentations, copies of your degree certificates, and the names and addresses of referees (two for the postdoctoral positions and one for the doctoral positions) who can be contacted directly.