



# Postdoctoral research associate position at the University of Freiburg (ATLAS experiment)

We are seeking a **highly motivated and enthusiastic** candidate to fill the position of a **post-doctoral research associate** to conduct research at the interface between particle physics and cosmology in the ATLAS experiment at the Large Hadron Collider at CERN.

The successful candidate is expected to take up a leading role in the development of novel searches for heavy Higgs bosons decaying to final states with  $b$ -jets or  $\tau$ -leptons as well as measurements of the Standard Model Higgs boson, which will be used to constrain models of baryogenesis, dark matter and dark energy. Technical work on the improvement of particle identification algorithms, Monte-Carlo modelling or statistical analysis techniques is foreseen. Participation in the operation of the ATLAS detector with frequent travels to CERN is expected. The position will be based at Freiburg.

The position is **available from 1 October 2020**. Applications which are complete and will be received until **31 August 2020** will receive full consideration.

## Requirements

- PhD degree in particle physics
- proven research record of exceptional quality with major contributions to physics analyses and/or performance work
- excellent knowledge of C++ and ROOT
- ability to work independently, produce original work and lead a research team including the supervision of PhD candidates

## Documents to submit with your application

- curriculum vitae
- short description of previous research experience and interests
- copies of certificates of degrees
- three letters of recommendation to be sent directly to [spyridon.argyropoulos@cern.ch](mailto:spyridon.argyropoulos@cern.ch)

The successful candidate will be integrated in the Emmy-Noether independent research group led by Dr. Spyridon Argyropoulos, which aims to exploit the recently discovered Higgs boson in order to investigate the major open problems of the dark universe: baryogenesis, dark matter and dark energy. The research group is hosted by the group of Prof. Dr. Karl Jakobs/Dr. Christian Weiser, which has held leading roles in the ATLAS experiment. The successful candidate will furthermore be part of the Research and Training Group “Mass and Symmetries after the Discovery of the Higgs Particle at the LHC”, which brings together experts from direct dark matter detection experiments, high-energy physics experiments and theorists, providing further training opportunities via regular seminar series and workshops.

Candidates are selected in accordance with the provisions of the AGG (Allgemeines Gleichbehandlungsgesetz - German General Equal Treatment Act). Applicants with disabilities (Schwerbehinderte Menschen) will be given preferential consideration in case of equal qualification.

For further inquiries please contact Dr. Spyridon Argyropoulos [spyridon.argyropoulos@cern.ch](mailto:spyridon.argyropoulos@cern.ch)