JOHANNES GUTENBERG UNIVERSITÄT MAINZ

The Johannes Gutenberg-University Mainz (Germany) has an opening for one

**Postdoctoral Fellow**
(TV-L EG 13)

in the ETAP (Experimentelle Teilchen- und Astroteilchen Physik) research group at the Institute of physics in the context of the future **IAXO Experiment**. The position can start as soon as January 2019 with a duration of two years. The ETAP group shares major responsibility for the construction, operation and upgrade of the ATLAS experiment at the LHC. In addition, the ETAP group is strongly involved also in other experiments such as IceCube (for the observation of high-energy neutrinos from astrophysical sources), Xenon (for the direct detection of dark matter) and NA62 (for the study of rare kaon decays). Since 2012, the ETAP group is also engaged in the search for **Axion-Like-Particles (ALPs)** using laboratory-based experiments. ALPs are hypothetical ultralight and very weakly interacting particles, which are an excellent candidate for the dark matter in the universe but also could explain several astrophysical observations.

The future postdoctoral researcher is expected to contribute to the design of an active muon-veto system, the development of low-energy photon detectors based on the Micromegas or GEM technologies as well as the implementation of computer simulations of the **IAXO Experiment**. Further information on IAXO can be found under http://iaxo.web.cern.ch. Under certain conditions, contributions to the upgrade of the muon system of ATLAS Experiment could be envisioned as well.

Candidates should have a Ph.D. in experimental particle physics by the time of appointment. Experience in working with gaseous detectors as well as computing skills towards simulations of particle detectors is desirable.

The Johannes Gutenberg-University Mainz aims at increasing the percentage of women in academic positions and strongly encourages women scientists to apply. The university is an equal opportunity employer and particularly welcomes applications from persons with disabilities. German language skills are not necessarily required.

Qualified candidates are requested to submit their application, including a curriculum vitae, a brief description of their research experience and interests and two letters of recommendation, to Prof. Dr. Matthias Schott, Institut für Physik, 55099 Mainz, Germany (or via e-mail to schottm@uni-mainz.de), until the 30$^{th}$ of November 2018. The position will remain open until filled.

**Contacts:**
Prof. Dr. Matthias Schott (schottm@uni-mainz.de)
https://www.lichtenberg.physik.uni-mainz.de