

and Structure of Matter



The Johannes Gutenberg-Universität Mainz (Germany) has an opening for a

Postdoctoral Research Associate (Physicist)

(TV-L EG 13)

to work on the ATLAS experiment in combination with non-ATLAS R&D projects on highly granular calorimetry, to be filled immediately.

The Mainz ATLAS group shares major responsibility for the construction, operation and upgrade of the L1 trigger and is involved in the liquid Argon calorimetry of ATLAS as well as the upgrade of the ATLAS muon system and the new high-granularity timing detector. Physics analysis activities include precision standard model physics, a broad range of searches for new physics, Higgs boson physics, as well as top quark physics. The ATLAS group is part of the Cluster of Excellence PRISMA+ "Precision Physics, Fundamental Interactions and Structure of Matter", which focuses on key questions concerning the fundamental constituents of matter and their implications for the physics of the Universe. Current activities beyond ATLAS include in particular research and development of highly granular sampling calorimeters for future experiments at CERN (SHADOWS/SHiP) and for future high-energy electron-positron colliders.

The successful applicant is expected to contribute to **physics analysis in the ATLAS experiment in the area of Higgs boson physics or searches for new physics, complemented with contributions to one of the non-ATLAS R&D projects**. Mainz University with its Cluster of Excellence PRISMA+, on-campus accelerators and excellent infrastructure within the detector laboratory provides a vibrant and unique place for R&D activities at and beyond the LHC.

Applicants are required to have a Ph.D. (or an equivalent degree) in physics and should have research experience in experimental high energy particle physics. Prior experience with detector design or construction as well as GEANT4-based simulation is desirable.

The Johannes Gutenberg-Universität 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.

The appointment will be initially for a period of two years, with the possibility of an extension. Qualified candidates are requested to submit their application, including a curriculum vitae, a brief description of their research experience and interests, and a list of the most relevant publications to Prof. Dr. Volker Büscher, Institut für Physik, 55099 Mainz, Germany (or via email to <u>buescher@uni-mainz.de</u>) and to arrange for at least two letters of recommendation to be sent directly to the same address.

Applications will be considered as they arrive and will be accepted until Feb. 24, 2023.

Contacts:

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