

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

Postdoctoral Research Associate (Physicist)
(TV-L EG 13)

in the ATLAS group, 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.

The successful applicant is expected to play a **leading role in the construction, integration and commissioning of the new ATLAS L1 jet trigger system (“jFEX”)**. This system consists of six custom-designed ATCA boards with four Xilinx Ultrascale+ FPGAs each. Operating at an input data bandwidth of more than 3 Terabit/s per module, the system will reconstruct jets and missing transverse energy in real time at an event rate of 40 MHz. The applicant will work with a team of engineers, physicists and PhD students to fully commission the system in time for the start of LHC Run 3.

Applicants are required to have a Ph.D. (or an equivalent degree) in physics and should have research experience in high energy experimental particle physics. Prior experience with digital electronics, commissioning or detector operation 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 three 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, a list of selected publications, and at least two letters of recommendation, to Prof. Volker Büscher and Prof. Stefan Tapprogge, Institut für Physik, 55099 Mainz, Germany (or via e-mail to buescher@uni-mainz.de and tapprogg@uni-mainz.de), at the earliest possible date, but latest by **August 12, 2018**.

Contacts:

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