





Engineer or physicist with a Ph.D degree (M or F), for a postdoc position on data acquisition developments for the CMS upgrades with an FPGA-based supercomputing system.

The Department of Particle Physics and the Department of engineering at the Université Libre de Bruxelles (ULB), Brussels, Belgium, are jointly seeking an engineer or a physicist with a Ph.D degree with experience in instrumentation in particle physics or in electronics (M/F).

Within the Brussels team, the successful candidate is expected to lead the study and the design of the data acquisition system architecture for the upgrades of the CMS experiment at LHC. This system, which will use state of the art technologies from computing science and telecommunication industry, will be based on programmable logic using standard electronic components (e.g. FPGA), and in particular a FPGAbased supercomputing system.

Applicants should have a strong background in digital electronics and in computing. Knowledge and practice in microprocessor architecture dependent optimizations using data and thread-level parallelism is an asset. The candidate should be motivated by the preparation of a large and modern experiment in particle physics, in an international high technology environment.

The work, which will be mainly performed at the <u>Inter-University</u> <u>Institute for High Energies – IIHE (ULB-VUB)</u> and at the <u>Bio-Electro-And</u> <u>Mechanical Systems (BEAMS)</u> department of ULB, will imply regular contributions to tests and collaboration meetings abroad. It does not impose teaching duties, but contributions to teaching are possible. The salary is competitive and includes all social security benefits (information is available on request).

The position will remain open until a suitable candidate is found. Interested candidates are encouraged to **apply before November 17st, 2014**, when a first application screening will take place. Applications should be sent by email (with subject "DAQ – post-doc position") to **Professor L. Favart** via the IIHE-ULB secretariat. They should include a detailed CV, a letter of motivation and the names of 3 referees.

Contact: Prof. Laurent FAVART – via the secretary: <u>Audrey.Terrier@ulb.ac.be</u> Phone : +32 2 629 3202 Web sites IIHE : <u>http://www.iihe.ac.be</u> Web site BEAMS: <u>http://beams.ulb.ac.be/</u>