



University of Hamburg
Department of Physics
Institute for Experimental Physics



Starting Jan 1st 2008, the Institute for Experimental Physics at Hamburg University has an opening for a

Physicist (Ph.D.)

to work on the Compact Muon Solenoid Experiment (CMS) at the Large Hadron Collider (LHC). The position (E13 TV-L) is jointly funded by the University and the "HGF-Alliance – Physics at the TeraScale" and limited to the funding period of the HGF Alliance until June 2012 (§ 2 Academic Fixed-Term Contract Law (Wissenschaftszeitvertragsgesetz)). The weekly working time is 39 hours.

The university intends to increase the number of women amongst its academic personnel and expressly encourages qualified women to apply. In compliance with the Hamburg Equal Opportunity Law, preference will be given to qualified female applicants. Preference will be given to disabled applicants with equal qualifications.

The Strategic Helmholtz Alliance "Physics at the Terascale" (<http://www.terascale.de>) is a research network supported by the Helmholtz Association and comprises the research centres DESY and FZ Karlsruhe, 17 German universities, and the Max-Planck Institute for Physics. The institute in Hamburg has a long standing tradition in experimental particle physics and currently is engaged in the H1 and ZEUS experiments at HERA, the CMS Experiment at the LHC, the preparation for experiments at the ILC, the OPERA and Double-CHOOZ neutrino experiments and the H.E.S.S. astroparticle experiment.

Within CMS our group is involved in the construction and commissioning of the CMS silicon strip tracker, the development of tracking detectors for the SLHC as well as in the preparation of analysis for Top quark physics and the search for Supersymmetry. Within the Hamburg Collaborative Research Centre (SFB) 676 "Particles, Strings and the Early Universe" an intense collaboration exists in almost all areas with other experimental and theoretical groups of the university and of the Deutsche Elektronen Synchrotron DESY which is located on the same campus.

The Research topic

The successful candidate is expected to further strengthen our analysis group on **Supersymmetry**. Possible research topics comprise the search for Supersymmetry in the first CMS data or the determination of fundamental SUSY parameters from experimental data using advanced fitting techniques. The candidate is further expected to engage strongly in the development of **techniques for jet energy measurements** with the CMS detector as these will dominate experimental uncertainties at LHC.

Requirements:

Candidates should hold a Ph.D. in experimental particle physics. Experience in the research topics mentioned above is preferred but not requested. Teaching is required at the level of four hours per week during the semester in form of exercise and laboratory classes or lectures (in English or German). The guidance of diploma and PhD students is of key importance. The research associate's duties include academic service within the respective academic department or institute. As a part of their contract, research associates will have the opportunity to conduct independent research and further their academic education.

Further information on the scientific program, the group and the position can be obtained from

Prof. P. Schleper, Institute for Experimental Physics, Luruper Chaussee 149, D-22761 Hamburg, Peter.Schleper@desy.de, phone +49-40-8998-2957, and from <http://www.desy.de/~schleper/Group>.

Applications with a letter of application, CV, academic records, list of publications, and the names of two persons which can provide information about the applicant should arrive by December 31st 2007 at

Prof. Ian Brock (Scientific Director of the HGF Alliance)

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