

# UNIVERSITY OF HAMBURG

**Faculty:** Mathematics, Informatics und Natural Science  
**Department:** Physics  
**Institute:** Institute for Experimental Physics

The university invites application for a several

## **PhD Positions** in **Experimental High Energy Physics (CMS experiment).**

Salary is according to German standard TV-L 13. The position calls for 19.5 hours per week and initially is limited to three years. (see also § 2 of the Academic Fixed-Term Contract Law (Wissenschaftszeitvertragsgesetz)).

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.

### **Scientific Environment**

The Department of Physics conducts leading edge research in a very international environment in particle physics (LHC, neutrino physics), detector R&D, astroparticle physics, accelerator development, astronomy, nano and photon science. Members of the high energy physics group actively participate in the CMS experiment located at the CERN LHC and in the development of silicon detectors and calorimeters. Third party funding is available through the federal initiative FSP-102 "Physics with the CMS Experiment" by the German ministry for education and research (BMBF), through the Excellence Cluster "Connecting Particles with the Cosmos" by the State of Hamburg and through the SFB-676 "Particles, Strings and the early Universe" by the German Science Foundation (DFG). A close collaboration exists with research groups in experimental and theoretical physics of DESY, which is located on the same campus.

### **Responsibilities:**

Our group is deeply involved in detector R&D as well as calibration and data analysis of the CMS experiment. Candidates are expected to engage in one of the following research fields:

- Top Physics,
- Search for Supersymmetry and other phenomena beyond the Standard Model,
- Development of new silicon pixel detectors.

Contributions to the running and calibration of the detector or computing are expected as well. Interested candidates will be offered the opportunity for own research, advanced training and development of teaching skills in a stimulating scientific environment.

### **Requirements:**

Applicants are required to hold an excellent degree in physics and to have good communication skills. Preference will be given to disabled applicants with equal qualifications.

Deadline for applications is 15.10.2012. Later applications are accepted until the positions are filled. Interested candidates are requested to submit a CV, copies of school and university examinations and a statement of research interests together with at least two names for reference letters to: Prof. P. Schleper, [peter.schleper@physik.uni-hamburg.de](mailto:peter.schleper@physik.uni-hamburg.de)

For more detailed information, please contact

Prof. [Erika.Garutti@physik.uni-hamburg.de](mailto:Erika.Garutti@physik.uni-hamburg.de), Prof. [Johannes.Haller@physik.uni-hamburg.de](mailto:Johannes.Haller@physik.uni-hamburg.de),  
JProf. [Christian.Sander@physik.uni-hamburg.de](mailto:Christian.Sander@physik.uni-hamburg.de), [Alexander.Schmidt@cern.ch](mailto:Alexander.Schmidt@cern.ch) and  
Prof. [Peter.Schleper@physik.uni-hamburg.de](mailto:Peter.Schleper@physik.uni-hamburg.de).