



Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG

The

**Faculty for Mathematics, Informatics and Sciences
Fachbereich Physik
Institute of Experimental Physics**

is searching for a

Physicist

for

Detector R&D for Particle Physics Application

Permanent position salary group 13 TV-L (state employees salary scheme)

Working time is 39 hours per week

Hamburg University intends to increase the number of women amongst its personnel and expressly encourages qualified women to apply. In compliance with the Hamburg Equal Opportunity Law, preference will be given to qualified female applicants.

The Institute of Experimental Physics, located on the DESY Campus in Bahrenfeld, conducts leading edge research in a very international environment in particle physics (LHC, neutrino-physics), astro-particle physics, accelerator R&D, and research with photons. Members of the high energy physics group actively contribute to the data analysis, the running and the upgrade of the CMS experiment at the CERN LHC. In a dedicated detector laboratory, R&D on radiation hard silicon sensors are performed, different types of silicon sensors are designed, simulated and evaluated, and students trained in the field of particle detectors.

Current research projects of the detector laboratory include the upgrade of the CMS Pixel detector, the investigation and improvement of the radiation hardness of silicon materials and sensors (RD50 and AGIPD collaborations), the development of SiPMs (Silicon Photo-Multiplier) and their applications in calorimetry for HEP (CALICE collaboration) and medical detectors (ENDO TOFPET US European FP7-health project).

The groups of the institute closely collaborate in common projects with research groups in experimental and theoretical physics of DESY.

The following tasks await you:

- Technical and scientific planning of the detector laboratory, which includes the development, design and support of laboratory measurement systems,
- support of the scientists and students working in the detector laboratory,
- basic R&D in silicon sensors, in particular with respect to radiation hardness,
- strong participation in the detector upgrade of the CMS detector.

Requirements profile:

- Academic degree in physics or physics engineering, preferentially doctoral degree,
- Demonstrated experience and competence in measurement techniques, electronics and detector design and development,
- Solid understanding of readout electronics and data acquisition systems,
- Experience in data analysis, simulation, and statistical methods,
- Leadership and management abilities, as required for the running and further development of a detector laboratory and for leading research projects; this requires a high degree of responsibility and reliability, and the ability to work both in a team and independently.
- Good knowledge of written and spoken English.
- Experience with TCAD simulation tools or equivalents is an advantage.

Are you interested in these tasks?

Then we would like to meet you. We are looking forward to your application, which describes your CV, your interest in the position, and your qualifications and experience, and gives the names of three scientists who are willing to provide letters of reference.

Preference will be given to disabled applicants with equal qualifications.

For questions, please contact Prof. Dr. Erika Garutti by e-mail:

erika.garutti@physik.uni-hamburg.de.

Deadline for applications is **10 April 2012**. Please send your complete application materials quoting the reference number ("**Kennziffer**" **606/13**) to:

Universität Hamburg
Organisation und Personalentwicklung
Kennziffer: 606/13
Moorweidenstraße 18
20148 Hamburg

or by e-mail to: UniHHAusschreibungsstelle@verw.uni-hamburg.de



Zertifikat seit 2010
audit familiengerechte
hochschule

Universität Hamburg is certified by the
family-friendly higher education audit