PHYSICS AT THE TERA SCALE
Helmholtz Alliance

The Strategic Helmholtz Alliance "Physics at the Terascale" (http://www.terascale.de) is a research network supported by the Helmholtz Associaction and comprises the research centres DESY and FZ Karlsruhe, 17 German universities, and the Max-Planck Institute for Physics. In the framework of the worldwide endeavour of studying the foundations of matter using accerelators with highest energies, the Alliance will bundle the expertise of the participating institutes and support a sustainable development.

As part of the alliance the "Virtual Institute for Detector Technologies (VLDT)" will be created by a number of universities and DESY and will provide basic detector development support, and in particular facilities for the development of complex front end electronics and semi-conductor detectors. Within the VLDT the following positions for engineers and technical physicists are available.

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universitätbonn

The University of Bonn plans to develop a facility for detector instrumentation and associated front end electronics. The facility will serve research projects both from partners within the Helmholtz Alliance and the Institute of Physics. The University has openings for

Physicist (Ph.D.) (A13/ A14)

to head this laboratory. He/She should have several years of experience in the development of particle physics detectors and instrumentation as well as in electronics. We expect leadership ability and experience in the management of highly collaborative projects for the LHC and ILC detectors. Applicants should also be interested in training students and visiting researchers; and a

Physicist/ IC designer (E13)

We are searching for IC designers with several years experience in analogue and digital design of ASIC chips and their application. Applicants must have expert knowledge in IC design tools (CADENCE, SPECTRE, VERILOG or similar) and practical experience in chip testing. For details about these job opportunities please contact wermes@uni-bonn.de or desch@physik.uni-bonn.de

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DESY

DESY will provide general detector development support services to members of the Helmholtz Alliance in the area of detector engineering and test beam support. To strengthen its team DESY has openings for

Two Physicist / Engineer (E12/ E13)

We are seeking candidates with a strong interest and background in detector design and detector building. The persons should become key members of a team at DESY in the context of the Helmholtz Alliance to support detector development for future projects in high energy physics (sLHC and ILC). They should have knowledge in mechanical engineering and/or electronics engineering, and modern CAD systems. Ideally they should be interested to work within large international projects. We welcome applications by engineers as well as by technically oriented physicists. Willingness to travel and to spend longer periods away from DESY will be required. The positions are initially limited to three years. For details about these job opportunities contact Ties.Behnke@desy.de

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UHH Universität Hamburg

The University Hamburg will provide support for Alliance members to study the radiation properties of detector materials. The University has an opening for a

Physicist (E13 TV-L)

to support the activities of the Helmholtz Alliance at Hamburg. The candidate will work primarily on the development of radiation hard silicon for sensors to be used for particle physics (sLHC and ILC) and photon research. The work includes support for irradiation campaigns (hadrons, electrons and photons) for novel silicon materials, material characterisation, the study of microscopic radiation damage, defect kinetics and their relation to macroscopic damage parameters. For details about these job opportunities please contact Robert.Klanner@desy.de at the Detector Laboratory of the Institute for Experimental Physics, Hamburg University.

The Heidelberg ASIC Laboratory located in the Kirchhoff-Institut für Physik at the Ruprecht-Karls-Universität Heidelberg will extend its scope to support scientists and Ph.D. students in the area of analogue and mixed-signal VLSI component and system design and test. The institute has openings for

Two Physicists / Engineers

for the design of integrated microelectronics, in particular analogue and mixed-signal circuits. An excellent knowledge of state-of-the art design- and simulation tools is required; and for the design and test of complex electronic circuits employing ASICs and FPGAs. Practical experience in electronic circuit design and construction is required. Both positions are located in the existing ASIC laboratory for microelectronics. They are immediately available and will be limited until 30.6.2012. For details about these job opportunities please contact meierk@kip.uni-heidelberg.de

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Universität Karlsruhe (TH)
Research University · founded 1825

The University of Karlsruhe will setup a service facility at the "Institut für experimentelle Kernphysik" enabling irradiation studies of prototype detectors. The institute has an opening for a

Physicist (Ph.D.)

Required is experience with the development, construction and operation of particle detectors with high spatial resolution for High Energy Physics experiments. The successful candidate will setup and lead the service facility as part of the Helmholtz Alliance. The irradiation programme is part of an R/D activity to develop detectors for the sLHC and ILC and uses as facilities the Cyclotron at the Forschungszentrum Karlsruhe and the X-Ray station of the institute. The position is vacant and initially limited to June 30, 2009. For details about these job opportunities please contact mullerth@ekp.uni-karlsruhe.de

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The full text of the advertisements is available under http://www.terascale.de or by contacting the addresses given above. Applications with the normal supporting documents should be directed to the Universities and Research Centres where the individual jobs are located.