

RECRUITMENT

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Deutsches Elektronen-Synchrotron International Linear Collider



DESY is one of the leading accelerator centres worldwide. The Laboratory's main research areas comprise a broad program of photon science, including the operation of synchrotron sources and the construction and use of X-ray lasers, and research in elementary particle and astroparticle physics.

The DESY group -FLC- plays a strong role in the worldwide effort to prepare the International Linear Collider (ILC), in the area of hardware development as well as physics and detector studies. We are looking for a

Particle Physicist (Ph.D.)

Reference code: 113/2007

to contribute to the detector optimization for the ILC. The successful candidate is expected to hold a Ph.D. in experimental particle physics, and preferably experience in data analysis and simulations. He or she should be willing to work in an international context, to supervise students and should have a strong interest in SUSY and its connection to cosmology. The position is limited to 3 years; an extension up to 5 years in total is possible.

Within this project we are looking for several

Ph.D. Students in Particle Physics

Reference code: 114/2007

Graduate Physicists with the focus on experimental physics are invited to submit their application including a resume and the usual documents.

All positions are embedded in the Collaborative Research Centre 676 „Particles, Strings and the Early Universe“ of the DFG. Involvement in ILC hardware development, HERA or LHC data analysis is possible as well. Please send your application to our personnel department quoting the reference code. You may also contact Mrs. Dr. Jenny List (jenny.list@desy.de) for further information.

Salary and benefits are commensurate with those of public service organisations in Germany. Handicapped persons will be given preference to other equally qualified applicants. DESY is an equal opportunity, affirmative action employer and encourages applications from women. DESY has a kindergarten on site.

Deutsches Elektronen-Synchrotron DESY
in the Helmholtz-Gemeinschaft

Notkestraße 85 • 22607 Hamburg • Germany
phone: +49 40/8998-3392 • www.desy.de
email: personal.abteilung@desy.de

Deadline for applications: October 31, 2007

The University of Virginia

Tenure-Track Faculty Position in Experimental High Energy Physics

The Department of Physics of the University of Virginia invites applications for an Assistant Professor tenure-track faculty position in experimental high energy physics starting in Fall semester 2008. Applicants must hold a doctorate in physics and be committed to teaching at both the graduate and undergraduate levels. Prior experience in experimental high energy physics is required. The University of Virginia experimental group has strong participation in the CMS experiment at the Large Hadron Collider and in the NOVA neutrino experiment at Fermilab. Candidates with interests in those experiments will receive special attention. Review of applications will begin on October 2, 2007; full consideration will be extended until December 31, 2007; however, the position remains open to applications until filled.

Interested candidates are to submit a curriculum vitae, a one page (minimum) or two page (maximum) summary of research and teaching interests at <https://jobs.virginia.edu/applicants/Central?quickFind=52261>. Three letters of reference are to be sent directly to phys-hep-exp-pos@virginia.edu (preferably), or to High Energy Physics Search Committee, Department of Physics, University of Virginia, 382 McCormick Road, P.O. Box 400714, Charlottesville, VA 22904-4714, USA

For information on our department, please visit our website at <http://www.physics.virginia.edu>.

The University of Virginia is an equal opportunity/affirmative action employer. Women and members of under-represented minorities are strongly encouraged to apply.



Project Scientist Position in High Energy Physics Group, University of California, Santa Barbara

The High Energy Physics Group at UC Santa Barbara is seeking an outstanding electrical engineer/scientist to lead UCSB's electronics development effort for upgrades to the silicon tracker of the CMS Experiment at CERN. We are especially interested in candidates who can contribute to the diversity and excellence of the academic community. Candidates must have a Ph.D. degree in electrical engineering or equivalent and proven leadership ability, communication skills, and the ability to successfully mentor graduate students. Familiarity with ASIC design, high-speed front-end electronics, low-level signal processing, and project management in large particle or nuclear physics projects are highly desirable. The appointment may be made at the assistant, associate, or project scientist level, depending on the qualifications of the applicant. Salary will be commensurate with qualifications. Please send a statement of interest and CV in PDF format, as well as the names/contact information of 3 references to Debbie Ceder <dla@hep.ucsb.edu> with subject "Project Scientist Application" by November 1, 2007. The position is effective as of January 1, 2008. Further information is available at <http://hep.ucsb.edu>. UCSB is an Equal Opportunity/Affirmative Action Employer.

INDIANA UNIVERSITY

Senior-Level Faculty Position in Experimental Nuclear Physics

The Department of Physics at Indiana University invites applications for a senior-level faculty position in experimental nuclear physics for an anticipated appointment beginning Fall 2008. We seek an outstanding scientist, an intellectual leader in the field who is interested in joining one of the top nuclear physics groups in the US. A commitment to excellence in teaching at the undergraduate and graduate level is essential. Current research activities of the group include high energy spin physics, hadron structure studies with neutrinos and polarized protons, neutrino oscillation physics, spectroscopy of exotic hadrons, fundamental neutron physics, and several electric dipole moment searches. We expect the successful candidate will expand our research in new directions, and applications from all areas of nuclear physics are welcome. The experimental nuclear physics group is a key part of the Indiana University Cyclotron Facility (IUCF), a multipurpose laboratory which conducts and supports basic research in nuclear physics, nuclear chemistry, accelerator physics, condensed matter and the life sciences.

Interested candidates are encouraged to contact Professor Mike Snow at snow@iucf.indiana.edu or (812)-855-7914, and to submit a letter of application, current curriculum vitae and arrange for submission of a minimum of six letters of reference to Kathy Hirons at khirons@indiana.edu (or by mail to **Professor Mike Snow, Faculty Search, Department of Physics, 727 E. 3rd St., Bloomington, IN, 47405-7105**).

Further information about the IU Physics Department and IUCF can be found at <http://www.physics.indiana.edu> and <http://www.iucf.indiana.edu>.

Indiana University is an Affirmative Action, Equal Opportunity Employer committed to excellence through diversity. The University actively encourages applications of women, minorities, and persons with disabilities.



ALBERT-LUDWIGS-
UNIVERSITÄT FREIBURG



550
Jahre
Albert-Ludwigs-
Universität Freiburg
1457 - 2007

The Faculty of Mathematics and Physics of the University of Freiburg / Germany invites applications for a

Professorship in Theoretical Physics (W3)

in the research area of **Quantum Field Theory and Theory of Elementary Particles**. It would be desirable to complement existing activities of the Physics Institute in theoretical and experimental particle physics. The position is available on 1. October 2008.

A prerequisite is the "Habilitation" or an equivalent scientific qualification. The successful applicant is expected to participate in the general teaching, in particular in theoretical physics, and administrative duties of the department. The university is seeking to increase the number of female faculty members and therefore especially encourages suitably qualified women to apply. Applicants with a physical handicap will be given preference over other candidates provided they are equally qualified.

The professorship is available as a permanent position. In case of a first time appointment to professorship, the appointment is, as a rule, temporary, with possible exceptions. The subsequent appointment to a permanent professorship does not require a renewed, full application procedure.

Applications (with a curriculum vitae, copies of degree certificates, list of publications and teaching records) should be sent by December 1st, 2007, to the **Dekan der Fakultät für Mathematik und Physik, Eckerstr. 1, D-79104 Freiburg, Germany**.

Deutsches Elektronen-Synchrotron
in the Helmholtz Association



DESY is one of the leading accelerator centres worldwide. The Laboratory's main research areas comprise a broad programme of photon science, including the operation of synchrotron sources and the construction and use of X-ray lasers, and research in elementary particle physics. Research at DESY relies on the interplay between photon science, particle physics and accelerator physics. 3000 researchers from around the world use the accelerator-based facilities at DESY.

DESY is seeking the

Chair of the Board of Directors (successor to Prof. Albrecht Wagner)

The activities of DESY in photon science include the operation of the synchrotron radiation source DORIS III, the hard X-ray source PETRA III (available for users in 2009), and the Free-Electron Laser user facility FLASH providing VUV and soft X-rays. DESY is strongly involved in the European XFEL facility for hard X-rays and hosts the Centre for FEL Science.

The activities of DESY in particle physics include a physics programme related to HERA, participation in the ATLAS and CMS experiments at the Large Hadron Collider, strong involvement in the International Linear Collider project as well as theoretical particle physics and cosmology. In astroparticle physics DESY is participating in the field of neutrino astrophysics with the Icecube experiment.

The activities in accelerator science and technology development focus on superconducting RF technology, the operation of synchrotron light sources, the development and operation of Linac driven light sources (FLASH, XFEL), and the International Linear Collider development.

The Chair of the Board of Directors is the scientific representative of DESY and chairs the Directorate, consisting of the directors for research in particle physics and research with photons, the director of accelerators and the director of administration. He or she carries the overall responsibility for the strategy of the laboratory and its research programmes, their scientific and technical goals, the resource planning and the relation with ministries, other research organisations and universities. The Chair of the Board of Directors is responsible for the international contacts of DESY and the collaboration with the other accelerator laboratories in Europe, Asia and North America.

The Chair of the Board of Directors is also responsible for the positioning of DESY in the Helmholtz Association. He or she is expected to take over responsibilities in the Association such as the coordination of the research area 'structure of matter'.

Outstanding scientists with a strong research record, international stature, and a broad spectrum of interest, ranging from research with photons to particle physics and accelerator science, who are interested in shaping the future of DESY as a major world research laboratory are invited to apply. The applicant's goal must be the strengthening of the excellence of DESY, building on the existing competences. For further information please contact Prof. Reinhold Ruckl (Chairman of the Search Committee, rueckl@physik.uni-wuerzburg.de). Applications should be sent to our personnel department.

Salary and benefits are granted on the basis of a full professor (W3) at a German University. Handicapped persons will be given preference to other equally qualified applicants. DESY is an equal opportunity, affirmative action employer and encourages applications from women. DESY has a kindergarten on site.

Deutsches Elektronen-Synchrotron DESY

in the Helmholtz Association

code: 102/2007 • Notkestraße 85 • 22607 Hamburg • Germany

phone: +49 40/8998-3392 • www.desy.de

email: personal.abteilung@desy.de

Deadline for applications: October 31, 2007



THE COCKCROFT INSTITUTE of
ACCELERATOR SCIENCE AND TECHNOLOGY

<http://www.cockcroft.ac.uk/>

Keckwick Lane, Daresbury, Warrington WA4 4AD,
Cheshire, United Kingdom



RESEARCH and ACADEMIC OPPORTUNITIES IN ACCELERATOR SCIENCE AND ENGINEERING

The Cockcroft Institute is a new, international, centre, for accelerator science and technology in the UK. Named after the British Nobel laureate, the late Sir John Cockcroft FRS, who is regarded as the pioneer of modern accelerator research, it was officially opened in September 2006 by the then UK Minister of Science Lord Sainsbury. It is a joint venture of the Universities of Liverpool, Manchester and Lancaster, the UK Science and Technology Facilities Council (STFC), and the North West Regional Development Agency (NWDA). Founded as a unique synergy of academia, national laboratory, and industry, the Institute is located in a purpose-built building housing staff and laboratory equipment next to Daresbury Laboratory and the Daresbury Science and Innovation Centre. Satellite centres are also in place at each university, enabling additional exploitation of cross-disciplinary expertise. The research excellence of the three stake-holding universities has grown from the birth of nuclear and particle physics in 1907 in Manchester, and the subsequent pioneering development of phase-synchronous accelerators in Liverpool in the 1930s, to now encompass research using particle accelerators in High Energy and Nuclear Physics, and in Photon and Neutron Science, at cutting-edge centres worldwide.

The Institute's aim is to provide the intellectual focus, the educational infrastructure, and the scientific and technological facilities for research in particle and photon beams using accelerators and lasers. Its mission is driven by the advancement and exploitation of knowledge for the development of innovative techniques and their application in particle/nuclear, synchrotron radiation and medical science and technology. Examples include non-linear dynamics of charged particle transport, microwaves and superconductivity, novel accelerating structures including photonic band-gap materials, innovative power sources such as Inductive Output Tubes and Multi-beam Klystrons, laser-plasma-beam interactions, principles of efficient energy recovery and exchange between particles and waves, and ultra-fast techniques at the femto-, and even atto-, second frontier. In pursuing such R&D, scientists and engineers are enabled to take major roles in the conception, design, construction, commissioning and operation of major accelerator facilities worldwide.

The R&D programme in the Institute already includes growing involvement in the Large Hadron Collider and its future luminosity upgrade, the International Linear Collider, a Muon Collider and a Neutrino Factory, high intensity neutron spallation technology, a SuperB factory, unstable isotope beams (HIE-ISOLDE and FAIR), non-scaling FFAG technology, and next-generation light sources such as FLASH, XFEL and 4GLS (underway at Daresbury). Staff in the Institute initiated, and now share responsibility for, the completion and exploitation on site of the Energy Recovery Linac Prototype (ERLP). The construction of an electron FFAG prototype (EMMA) is also well advanced. Advanced laser-plasma and FEL research is underway at collaborative institutions. The Institute houses state-of-the-art vacuum, RF, and laser laboratories, which underpin the activities of all research groups. A substantial theory group is engaged in new approaches to the application of electrodynamics to particle accelerator and delivery systems necessitated by the immense challenges of the future. As the expertise and number of staff grow, new initiatives, for example developments for new ring-ring and linac-ring colliders such as a Large Hadron electron Collider (LHeC), and for high gradient, two-beam, acceleration such as CLIC at CERN, are in discussion. Present work of staff involves collaboration with CERN, DESY, BINP, SINP, KEK, BEPC, JLab, LLNL, FNAL, BNL, LBNL, SLAC, ANL, RAL and DL.

The Cockcroft Institute is seeking highly motivated and interested individuals to join the Institute and shape its future as junior and senior faculty members in one of the stake-holder universities. These positions include the possibility of joint appointments with the STFC and its Accelerator Science and Technology Centre (ASTeC). Appointments will be made at Lecturer, Reader and Professor levels, commensurate with expertise and experience, with globally competitive salaries, and with benefits packages in accordance with the established Human Resources policies of the employer. In this instance appointments to six faculty positions are sought, comprising two in association with the University of Liverpool, one each in association with the Universities of Manchester and Lancaster, and two jointly with STFC.

To register early interest and to discuss further details, please contact directly the Director, Prof. Swapan Chattopadhyay (swapan@cockcroft.ac.uk; phone +44 (0)1925 603242). Those interested in making applications are asked to send a complete resume, with a full list of publications and names/addresses of three references (in full confidence) to the Cockcroft Institute Operations Manager, Ms. Liz Mason (e.a.mason@dl.ac.uk; phone +44 1925 603156, fax +44 1925 864303) before December 31, 2007 at the Institute address above. These positions will also be advertised by the individual universities to which formal application must be made, and for which, following initial discussion from the Director, guidance can be given. All positions are expected to be filled by June, 2008.



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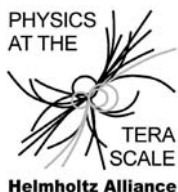
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The Strategic Helmholtz Alliance “Physics at the Terascale” (<http://www.terascale.de>) is a research network supported by the Helmholtz Association and comprises the research centres DESY and FZ Karlsruhe, 17 German universities, and the Max-Planck Institute for Physics. In the framework of the worldwide endeavour of studying the foundations of matter using accelerators 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.



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



The Helmholtz Centre 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



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



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

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.



STANFORD UNIVERSITY
STANFORD LINEAR ACCELERATOR CENTER
FACULTY POSITION – PARTICLE PHYSICS
EXPERIMENTALIST

The Stanford Linear Accelerator Center (SLAC) invites applications for an appointment of a tenure-track assistant professor in experimental particle physics. We seek candidates with significant accomplishments and promise for future achievement. The successful candidate is expected to play a key role in the energy frontier particle physics program at SLAC, with emphasis on the ATLAS experiment at the LHC for the near term and the buildup of an experiment at the ILC for the future.

Candidates should submit a curriculum vitae, publication list, a statement of research plans and have three letters of reference sent to:

Experimental particle physics search committee, c/o PPA Faculty Affairs, MS 60, Stanford Linear Accelerator Center, 2575 Sand Hill Road, Menlo Park, CA 94025, USA or (ppa_facultyaffairs@slac.stanford.edu).

Review of applications begins November 16, 2007, though later applicants may be considered. Electronic applications are preferred. SLAC is an equal opportunity employer and is committed to increasing the diversity of its faculty. It welcomes nominations of and applications from women and members of minority groups, as well as others who would bring additional dimensions to the research and teaching missions.

Assistant Professor in Theoretical Particle Physics (Phenomenology)
Illinois Institute of Technology

The Physics Division at Illinois Institute of Technology is seeking applications for a tenure track position in theoretical particle physics (phenomenology) at the level of Assistant Professor starting August 2008. The successful candidate will be provided with a competitive start-up package and laboratory space, and will be expected to establish an innovative, externally funded research program and to excel at teaching in both our undergraduate and graduate programs. For full consideration, submit a curriculum vitae, a summary of research plans, and a statement of teaching interests and philosophies, and arrange for three letters of recommendation to be sent to Prof. Carlo Segre, Chair, Physics Search Committee, physics_search@bcps.iit.edu. The deadline for applications is December 15, 2007.

Illinois Institute of Technology is an equal opportunity, affirmative action employer. Women and minorities are strongly encouraged to apply.



PhD Research Studentship
EXPERIMENTAL ANTIMATTER PHYSICS
 Physics Department, Swansea University

A Ph.D. project on antihydrogen is on offer in the Fundamental Atomic Physics group. The group plays a leading role in the ALPHA antihydrogen experiment at CERN in Geneva, Switzerland.

The aim of this experiment is to trap cold antihydrogen in preparation for precision comparisons of hydrogen and antihydrogen. The student will spend most of his/her time at CERN. The experiment involves many subfields of physics and offers many opportunities for the engaged, independent student. The student will work on the plasma physics aspects of the antihydrogen formation. Using rotating electric fields it is possible to control the size and density of the positron and electron plasmas used as well as, possibly, the antiprotons. The aim of this project is to study how the parameters of the plasmas influence the formation of antihydrogen, and how this influences the trapping efficiency.

The studentship will pay home/EU fees + an enhanced bursary of £20,000 p.a. Starting date is as soon as can be arranged.

Enquiries are invited from those with an outstanding academic record. Experience in experimental physics will be an advantage. Send CV or contact: Dr. Niels Madsen, N.Madsen@swan.ac.uk.



University of Heidelberg
Heidelberg Graduate School
of Fundamental Physics

The Heidelberg Graduate School of Fundamental Physics (HGSFP) at the University of Heidelberg, established in the framework of the Excellence Initiative of the German Federal and State Governments, invites applications for

Doctoral Scholarships

in its core areas of modern fundamental physics: (a) Particle Physics and Cosmology, (b) Astronomy and Cosmic Physics and (c) Quantum Dynamics and Complex Quantum Systems. The HGSFP combines doctoral projects at the forefront of international research in the areas mentioned above with a rich and thorough teaching program. Further information can be found on the School's web site: <http://www.fundamental-physics.uni-hd.de>.

Membership in one of the two International Max Planck Research Schools (IMPRS) for Astronomy & Cosmic Physics (<http://www.mpia.de/imprs-hd>) or for Quantum Dynamics in Physics, Chemistry and Biology (<http://www.mpi-hd.mpg.de/imprs-qd>) is envisaged if appropriate.

We invite highly qualified and motivated national and international students to apply. Applicants should hold a Master of Science or equivalent degree in physics. At equal level of qualification, preference will be given to disabled candidates. Female students are particularly encouraged to apply.

Applications for scholarships should arrive by **December 13, 2007**. Applicants have to initiate their application registering via a web form available at <http://www.fundamental-physics.uni-hd.de/scholarships.php>.



LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

FACULTY OF PHYSICS

The **Faculty of Physics** at the Ludwig-Maximilian-University Munich invites applications for a

Full Professor Position (W3)
 in the field of
Theoretical High Energy Physics
 – Succession Prof. Fritzsche –

The main field of research shall be the phenomenology of high energy physics and, in particular, new physics beyond the Standard Model of particle physics. Here a close connection with the physics of the LHC at CERN and with the particle and astroparticle physics of the early universe should be visible. Active participation in the teaching program of the department is required, and also participation in the new Cluster of Excellence "*Origin and Structure of the Universe*", recently been installed at the Campus Garching within the Excellence Initiative of the Federal Government of Germany, is desired.

We are seeking candidates, who are internationally recognized researchers in the fields described above. The possible candidates must not be older than 52 years at the time of the appointment. In urgent cases exceptions can be permitted.

Prerequisites for employment are a university grade, pedagogical suitability. Ph.D. or doctoral degree and additional scientific qualification which can be proved by a habilitation or equivalent achievements.

The Ludwig-Maximilian-University aims at raising the proportion of women in research and teaching and therefore explicitly requests female scientists to apply.

Please, send your application including the usual materials (CV, list of publications, certificates of university degrees) before **10th November 2007** to the **Dekan der Fakultät für Physik, Ludwig-Maximilians-Universität, Schellingstr. 4, 80799 München, Germany**.



Research Positions LIGO Laboratory

California Institute of Technology (Caltech) Massachusetts Institute of Technology (MIT)

The Laser Interferometer Gravitational-Wave Observatory (LIGO) has as its goal the development of gravitational wave astronomy. The LIGO Laboratory is managed by Caltech and MIT, and is sponsored by the National Science Foundation. It has built and now operates facilities equipped with laser interferometric detectors at Hanford, Washington and Livingston, Louisiana. The detectors have achieved design sensitivity and a data set spanning more than a year of coincidence operation has been collected. Analysis is ongoing, with extensive participation by the LIGO Scientific Collaboration (LSC). Further observation will be interleaved with incremental improvement of the instruments over the coming years, with a major upgrade (Advanced LIGO) in preparation. In addition, a vigorous R&D program supports the development of enhancements to the detectors as well as future capabilities.

The LIGO Laboratory expects to have positions at Caltech, MIT and at the two observatory sites. Scientists will be involved in the operation of LIGO itself, analysis of data, both for diagnostic purposes and astrophysics searches, as well as the R&D program for future detector improvements. Expertise related to astrophysics, modeling, data analysis, electronics, laser optics, vibration isolation and control systems is useful. Most importantly, candidates should be broadly trained physicists, willing to learn new experimental and analytical techniques, and ready to share in the excitement of building, operating and observing with a gravitational-wave observatory. In general, appointments will be at the post-doctoral level with one-year initial appointments with the possibility of renewal for up to two subsequent years. In some cases, appointments with an initial term of three years or of an indefinite term may be considered. Appointment is contingent upon completion of all requirements for a Ph.D.

Applications for positions at any LIGO Laboratory site (Caltech, MIT, Hanford, or Livingston) should be sent to HR@ligo.caltech.edu (Electronic Portable Document Format (PDF) submittals are preferred). OR mailed to either:

Dr. Jay Marx, c/o Cindy Akutagawa
Caltech
1200 E. California Blvd
LIGO 18-34
Pasadena, CA 91125

OR

Dr. David Shoemaker
MIT
185 Albany St
LIGO NW22-295
Cambridge, MA 02139

Applications should include curriculum vitae, list of publications and the names, addresses, email addresses and telephone numbers of three or more references. Applicants should request that three or more letters of recommendations be sent directly to HR@ligo.caltech.edu (Electronic Portable Document Format (PDF) submittals are preferred) or mailed to Dr. Marx or Dr. Shoemaker. Consideration of applications will begin December 1, 2007 and will continue until all positions have been filled.

*Caltech and MIT are Affirmative Action/Equal Opportunity Employers
Women, Minorities, Veterans and Disabled Persons are encouraged to apply*

More information about LIGO available at www.ligo.caltech.edu

Joint Position in Experimental Particle Physics:

Assistant Professor at the University of Illinois at Chicago and Associate Scientist at Fermi National Accelerator Laboratory

The Department of Physics at the University of Illinois at Chicago (UIC) and Fermi National Accelerator Laboratory (Fermilab) invite applications for a joint position at the level of Assistant Professor (tenure track) and Associate Scientist respectively, in the area of experimental high-energy particle physics. The position is equally shared between the two institutions with a commensurate reduction in the UIC teaching load. Applicants should have a Ph.D. in physics and have demonstrated an outstanding record of research accomplishments. The successful candidate is expected to establish an externally-funded research program and play a leadership role in the CMS experiment. A strong commitment to teaching at both the undergraduate and graduate levels along with participation in the activities and responsibilities of both institutions are also expected.

Candidates should submit a letter of application, curriculum vitae, list of publications, and a statement of research interests and plans, and should arrange for at least three letters of recommendation to be sent to the address below:

Prof. Nikos Varelas, Search Committee Chair,
c/o Stephanie Clarke
University of Illinois at Chicago
Department of Physics
845 W. Taylor St., M/C 273
Chicago, IL 60607

To ensure full consideration, all information should be received by
December 1, 2007.



UIC and Fermilab are Equal Opportunity/Affirmative Action Employers, and applications from women and minority scholars are strongly encouraged.

INDIANA UNIVERSITY

Junior Faculty Position in Theoretical Physics

The Department of Physics at Indiana University invites applications for a tenure-track Assistant Professor position in Theoretical High Energy and/or Theoretical Nuclear Physics for an anticipated appointment beginning Fall 2008. We are seeking highly qualified candidates who will complement or expand upon current research activities of the High Energy Theory and/or Nuclear Theory group focused particularly on any aspect of sub-nuclear physics, astro-particle physics or nuclear astrophysics. The current research directions include nuclear and astro-particle physics, beyond standard model phenomenology, tests of Lorentz and CPT symmetry, lattice QCD and hadron phenomenology and nuclear structure.

Applicants should have a Ph.D., an outstanding research record and commitment to excellence in teaching at both undergraduate and graduate level. The Indiana University Physics Department currently has 37 faculty carrying out research in Accelerator Physics, Experimental Nuclear and High Energy Physics, Condensed Matter and Material Science, and Biophysics.

Applications should be submitted via email to physsrch@indiana.edu or by mail to:

**Theoretical Physics Search, Physics Department,
Indiana University, Bloomington, IN 47405**

Interested applicants should submit a letter of application and curriculum vitae with list of publications, a description of research interests, and arrange for submission of a minimum of three letters of reference. Review of applications will begin on January 15, 2008 and will continue until the position is filled. Further information about the IU physics department can be found at <http://www.physics.indiana.edu>.

Indiana University is an Affirmative Action, Equal Opportunity Employer committed to excellence through diversity. The University actively encourages applications of women, minorities, and persons with disabilities.

Max Planck Institute for Physics

(Werner Heisenberg Institute)



MAX-PLANCK-GESELLSCHAFT

The Max-Planck-Institute for Physics and the Excellence Cluster "Origin and Structure of the Universe" invite applications for a

Postdoctoral position

in the newly established Junior Research Group on Detector Development in Particle Physics. The Cluster of Excellence has recently been installed on the Garching Campus as part of the Excellence Initiative of the federal government of Germany. The Junior Research Group focuses on research and development on hadronic calorimetry for future experiments, e.g., at the International Linear Collider. The group will study gaseous detectors for a finely segmented digital hadronic calorimeter and will contribute to the development of particle flow algorithms for an optimized jet reconstruction. Detector simulations will also play a crucial role in the evaluation of different calorimeter concepts.

The Junior Research Group also plans to participate in data analysis of high energy polarized proton-proton collisions within the spin physics program of the STAR experiment at the Relativistic Heavy Ion Collider at Brookhaven National Laboratory. Here jet and di-jet production is used to gain information about the spin structure of the proton, in particular the contribution of the gluons to the proton spin.

Applicants should hold a Ph.D. in high-energy physics or a related field and should have a strong interest in detector development and data analysis. Programming skills (C++, ROOT) and an interest in detector simulations (GEANT4) are expected.

Salary and benefits are commensurate with public service organizations (TVöD Bund). The contract is initially limited to 2 years with the possibility of an extension. The Max Planck Society is an equal opportunity employer. The goal is to enhance the percentage of women where they are underrepresented. Women, therefore, are especially encouraged to apply. The federal government of Germany is committed to employing more handicapped people, and applications from handicapped people are particularly welcome.

Interested candidates should apply online at <http://www.universe-cluster.de/> and arrange for at least two letters of reference to be sent to:

Max-Planck-Institut für Physik

Frau F. Rudert

Föhringer Ring 6, D-80805 München

Further information can be obtained from Dr. Frank Simon (Email: fsimon@mit.edu). Applications should be received by October 31, 2007.

Deutsches Elektronen-Synchrotron Particle and Accelerator Physics



DESY is one of the leading accelerator centres worldwide. The Laboratory's main research areas comprise a broad program of photon science, including the operation of synchrotron sources and the construction and use of X-ray lasers, and research in elementary particle and astroparticle physics.

For analysis of HERA data, the experiments ATLAS and CMS at LHC, and for the preparations of the International Linear Collider ILC (accelerator and experiments) several

DESY Fellowships

at Hamburg and Zeuthen are announced. Scientists who have completed their Ph.D. within the last 4 years are invited to submit their application including a resume and the usual documents (curriculum vitae, list of publications and copies of university degree). They should arrange for three letters of recommendation to be sent to the personnel department of DESY.

The DESY Fellowships are awarded for a duration of 2 years with the possibility for prolongation by one additional year.

Salary and benefits are commensurate with those of public service organisations in Germany. Handicapped persons will be given preference to other equally qualified applicants. DESY is an equal opportunity, affirmative action employer and encourages applications from women. DESY has a kindergarten on site.

Deutsches Elektronen-Synchrotron DESY

in the Helmholtz Association

code: 115/2007 • Notkestraße 85 • 22607 Hamburg • Germany

phone: +49 40/8998-3392 • www.desy.de

email: personal.abteilung@desy.de

Deadline for applications: October 31, 2007

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THE PANOFSKY FELLOWSHIP
– CALL FOR NOMINATIONS –
Deadline: November 15, 2007

The Panofsky Fellowship honors SLAC's founder and first Director, Wolfgang K. H. Panofsky. It is intended to recognize exceptional and promising young scientists who would most benefit from the unique opportunity to conduct their research at SLAC. The fellowship carries a five-year term, with salary and benefits comparable to an Assistant Professorship at SLAC. Panofsky Fellows may carry out research in theory or experiment in one or more areas of the SLAC program: elementary particle physics, accelerator and beam physics, particle astrophysics and/or cosmology.

Candidacy for this Fellowship is **by nomination only**. Faculty and staff of any institution carrying out research related to SLAC's program are encouraged to submit a nomination. Nominees should be in their early postdoctoral careers, yet widely recognized as having potential for exceptional scholarship, breadth, innovation, and leadership. **The deadline for the 2008 nominations is November 15, 2007.**

For further information, please consult http://www2.slac.stanford.edu/panofsky_fellow/ or contact Lilian DePorcel at lilian@slac.stanford.edu. SLAC is an equal opportunity employer and welcomes nominations of women and minority group members.

Wilson Fellowship in Experimental Physics

The Wilson Fellowship program at Fermilab seeks applications from Ph.D. physicists of exceptional talent with at least two years of postdoctoral work. The fellowships are awarded on a competitive basis and support physicists early in their careers by providing unique opportunities for self-directed research in experimental physics. Fellows will work on the Fermilab particle physics experiment of their choice. The Fermilab experimental program includes collider physics at both the Tevatron and the LHC, studies of neutrino and astroparticle physics, as well as R&D for future colliders and high intensity beams.

The Wilson Fellowships are tenure track positions with an annual salary fully competitive with university assistant professorships. The appointment is for an initial term of three years and can be renewed for an additional two years upon the completion of a successful review after the first two years.

Each candidate should submit a research statement describing a proposed research program, a curriculum vitae, and should arrange to have four letters of reference sent to the address below. Application materials and letters of reference should be received by November 2, 2007.

Materials, letters, and requests for information should be sent to:

Wilson Fellows Committee Fermi National Accelerator Laboratory
 MS 122, Attention: Cathryn Laue
 P.O. Box 500, Batavia, IL 60510-0500
 or Email: wilson_fellowship@fnal.gov

Additional information is available at:

http://www.fnal.gov/pub/forphysicists/fellowships/robert_wilson/



Fermilab is an Equal Opportunity Employer - M/F/D/V

POSTDOCTORAL POSITIONS IN EXPERIMENTAL PHYSICS WITH GLAST AT SLAC

SLAC invites applications for Postdoctoral Researchers to work with the GLAST Large Area Telescope (LAT) team. SLAC hosts the LAT Instrument Science Operations Center (ISOC) and is responsible for configuration, calibration, and initial data processing. Research at SLAC focuses on search for dark matter, cosmic particle interaction and acceleration mechanisms, and relativistic outflows. For details see <http://glast.stanford.edu> and <http://glast-isoc.slac.stanford.edu/>.

Appointees will conduct research with GLAST and related multi-wave-length data, and play significant roles in instrument operation and performance analysis in collaboration with ISOC. Ph.D. in Physics or Astrophysics is required. The tenure is two years, with the potential renewals subject to satisfactory performance. Applicants should send a letter stating research interests, a CV, and three reference letters to raadmin@slac.stanford.edu by emails (preferred) or by postal mail to **SLAC, MS 60, 2575 Sand Hill Road, Menlo Park, CA 94025** no later than December 1, 2007.

SLAC is an equal opportunity employer committed to increasing the diversity of its staff and welcomes applications from women and minority groups.

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