

RECRUITMENT

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LIGO

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 reached design sensitivity and a broad observational program is underway, with extensive participation by the LIGO Scientific Collaboration (LSC). Running will be interleaved with incremental improvement of the instruments over the coming years. In addition, a vigorous R&D program supports the development of future detectors.

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 pioneering the new field of gravitational wave astrophysics. 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 either:

Dr. Jay Marx
Caltech
1200 E. California Blvd
LIGO 18-34
Pasadena, CA 91125
HR@ligo.caltech.edu

Dr. David Shoemaker
MIT
175 Albany St
LIGO NW17-161
Cambridge, MA 02139
HR@ligo.caltech.edu

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 Dr. Marx or Dr. Shoemaker. Consideration of applications will begin December 1, 2006 and will continue until all positions have been filled. Electronic Portable Document Format (PDF) submittals are preferred. Email to: HR@ligo.caltech.edu

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



Junior Faculty Appointment in Theoretical Physics Harvard University Faculty of Arts and Sciences

Applications are invited for faculty appointments in theoretical high energy physics, broadly defined, at Harvard University. The initial appointment as an assistant professor for the academic year 2006-2007 would normally be for a term of five years, with promotion (to untenured associate professor and subsequently to tenured professor) possible for outstanding candidates. Applications should be sent by November 1, 2006 to:

**Theoretical Search Committee, c/o Ms. B. Currier, Department of Physics
Harvard University, Jefferson Physical Laboratory, Room 370, 17 Oxford
St. Cambridge, MA 02138**

Applications should include a curriculum vitae, a publication list, and a brief research statement. Candidates should ask three referees to send professional evaluations.

*Harvard University is an Equal Opportunity/Affirmative Action employer.
Applications from women and minority candidates are especially encouraged.*

The Institute of Physics in the Faculty of Mathematics and Natural Sciences I at the Humboldt-University Berlin



seeks to fill the position of a

Professor (W2) for Experimental Physics (Experimental Elementary Particle Physics II).

The candidates should be able to cover the whole discipline of experimental physics in teaching. In research they should participate in the present and future experimental program of particle accelerators at DESY and/or CERN, in particular at LHC. An additional participation in projects of astroparticle physics will be possible. The institute expects an active collaboration with the existing research group 'Experimental Elementary Particle Physics I'. The applicants should have a high international reputation and competence in the given research field and be willing to cooperate within the academic faculty and university councils.

Applicants have to satisfy the legal requirements for appointments of professors in accordance with §100 Berliner Hochschulgesetz - BerHIG.

The Humboldt-University aims at increasing the fraction of female staff and encourages women to apply. Equally qualified but disabled candidates will be appointed preferentially.

Applications including the usual professional documentation and referring to code number **PR/011/06** should be sent **within 6 weeks to Humboldt-Universität zu Berlin, Dekan der Mathematisch-Naturwissenschaftlichen Fakultät I, Prof. Dr. C. Limberg, Newtonstrasse 15, D-12489 Berlin, Germany**. For speeding up the procedure, it is strongly recommended that applicants provide their application material also in electronic form (<https://www.physik.hu-berlin.de/ssl/CallEEP2>).



Director, Particle Astrophysics Center, Fermi National Accelerator Laboratory And Professor of Astronomy and Astrophysics, University of Chicago

Fermi National Accelerator Laboratory and The University of Chicago invite applications for a joint appointment as Director of the Particle Astrophysics Center at Fermilab and Professor of Astronomy and Astrophysics at The University of Chicago.

Applicants are expected to have an outstanding record of leadership and scientific accomplishment. The Director of the Particle Astrophysics Center will provide the leadership and vision to shape the Fermilab particle-astrophysics program, which now includes groups involved in theoretical astrophysics, the Sloan Digital Sky Survey, the Cryogenic Dark Matter Search, the Pierre Auger Experiment, and the Supernova Acceleration Probe. The appointment of Professor of Astronomy and Astrophysics will involve both research and teaching.

Applications received before November 15, 2006 will receive full consideration.

Applications, including a curriculum vita, a list of publications, and suggestions for outside references should be sent to:

Joint Search Committee
Particle Astrophysics Center
MS 209
Fermi National Accelerator Laboratory
P.O. Box 500
Batavia, IL 60510-0500



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National Synchrotron Light Source-II

National Synchrotron Light Source-II (NSLS-II) will be a new, ultra-low emittance synchrotron that will deliver ultra-high brightness and flux and exceptional beam stability. With its advanced insertion devices, optics, detectors and scientific instruments, NSLS-II will facilitate forefront research in the material, chemical, environmental, biological, medical, and physical sciences. Brookhaven National Laboratory invites applications from physicists and engineers with expertise in the areas of accelerators, beamlines, and instrumentation for NSLS-II.

Successful candidates will have an advanced degree in Physics or Engineering and substantial experience in their field. Experience in the research and development, design and construction, or operation of accelerators, beamlines, or instrumentation is required. Areas of special interest include, but are not limited to: determining and designing the optimum configuration of the lattice to maximize the machine performance for high brightness; determining methods to meet the dynamic aperture challenge by maximizing the stable phase space area of the electron beam; developing schemes to produce short x-ray pulses; developing ways to improve injection efficiency, beam stability, and lifetime; designing and commissioning state-of-the-art beamlines and optics to provide high-energy and high-spatial resolution; generating and developing user populations and scientific research programs for the beamlines.

Qualified and interested applicants may submit their resumes to jhall@bnl.gov. For further information about BNL, NSLS-II or other job openings, please visit www.bnl.gov or www.bnl.gov/nsls2/.

BNL, a multiprogram research facility managed by Brookhaven Science Associates for the U.S. Department of Energy, is an equal opportunity employer committed to building and maintaining a diverse work force.

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TWO FACULTY POSITIONS IN EXPERIMENTAL NUCLEAR PHYSICS

The Department of Physics and Astronomy at the University of Kentucky invites applications from well qualified candidates for two tenure-track Assistant Professorships in our experimental nuclear physics group. The candidates must have a Ph.D. in physics and postdoctoral research experience. The nuclear physics program at UK focuses on the detailed understanding of the structure, interactions, and symmetries of hadrons in terms of their fundamental constituents. Our group has leadership roles in the polarized ^3He program in Hall A at Jefferson Lab and in the LANL neutron EDM experiment which is expected to run at the newly established SNS (ORNL). Interested candidates should have experience in electromagnetic nuclear physics or in fundamental symmetry tests at low energies. The successful candidates are expected to strengthen our efforts in existing programs and to establish their own research careers, as well as contribute to the Department's undergraduate and graduate teaching missions.

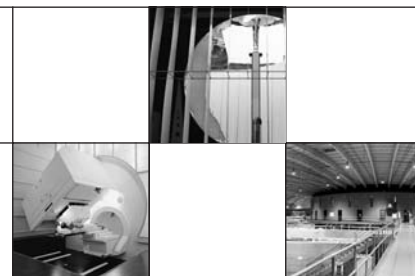
Details about our department can be found at <http://www.pa.uky.edu>. Applicants should submit a curriculum vitae, a brief statement of present and future research plans, a publications list, and arrange for three letters of recommendation to be sent to

Prof. W. Korsch, Department of Physics and Astronomy, University of Kentucky, 177 Chem.-Phys. Bldg., Lexington, KY 40506-0055.

Initial consideration of applications will begin December 1, 2006 with an anticipated starting date of August, 2007.

The University of Kentucky is an equal opportunity employer and strongly encourages applications from women and minorities.

PAUL SCHERRER INSTITUT



The Paul Scherrer Institut is a centre for multi-disciplinary research and one of the world's leading user laboratories. With about 1200 employees it belongs as an autonomous institution to the Swiss ETH domain and concentrates its activities on solid-state research and materials sciences, elementary particle physics, energy and environmental research as well as biology and medicine.

PSI is developing and operating proton and electron accelerators for fundamental and applied research. A proton accelerator with the highest average power worldwide is the driver for the spallation neutron source SINQ and the generation of pions and muons for structural analysis. An upgrade program is under way for an increase of the proton current from 2 to 3 mA and correspondingly the beam power from 1.2 to 1.8 MW.

The electron storage ring of the Swiss Light Source (SLS) is used to generate highly brilliant and coherent light from the UV to the X-ray range. It is considered as the technically most advanced light source with exceptional intensity and position stability generated by top-up injection. An upgrade is currently in completion for the generation of femtosecond X-ray pulses.

A Free Electron Laser is in development to extend the capabilities of the SLS. Its fully coherent, short pulse (femtosecond) radiation with orders of magnitude higher power and brightness will make this facility an extremely valuable light source for scientific research. It is based on a novel concept of an electron gun using field emission from nano-structured tip arrays.

The Paul Scherrer Institut is sponsoring a

PSI Postdoctoral Fellowship for Excellence in Accelerator Science and Technology

This special postdoctoral fellowship is open to an outstanding doctoral physicist or engineer who is at the starting point of a promising career. The fellowship will be awarded in the areas of accelerator physics and technology, beam diagnostics and advanced computational beam simulations. The successful candidate will be a recent graduate with a PhD or equivalent education. The fellowship consists of a two year contract with a competitive post-doctoral salary and additional benefits.

For further information please contact Prof. Dr. Leonid Rivkin, Head of the Department Large Research Facilities, ph. +41 56 310 3214, e-mail leonid.rivkin@psi.ch,

Candidates should submit their application with a description of their accomplishments and two letters of recommendation before October 31, 2006, to: Paul Scherrer Institut, Human Resources, Mr. Thomas Erb, ref. code 8000, 5232 Villigen PSI, Switzerland.

Also for the new project of a Free Electron Laser (FEL) at PSI we are looking for a

Physicist (Postdoc or Junior scientist)

to strengthen the team which is developing an advanced concept for the FEL and, in particular, to contribute to the evaluation and optimization of the FEL performance.

The work will involve the design of a low-emittance accelerator concept, Start-to-End simulations and performance analysis of the low-emittance linac concept and the expected FEL performance, verification that the machine design is technically realistic both in terms of construction and operation, design of correction and feedback concepts and design of diagnostic stations.

The profile of a successful candidate will include a good background in electromagnetism, preferably experience in both theoretical AND experimental accelerator physics and knowledge of Unix and scripting languages as well as programming experience in FORTRAN and/or C++.

For further information please contact Dr. Rene Bakker, ph.+41 56 310 5101, e-mail: rene.bakker@psi.ch.

Please send your application to: Paul Scherrer Institut, Human Resources, Mr. Thomas Erb, ref. code 0600, 5232 Villigen PSI, Switzerland.

Assistant Professor(s), Experimental and Theoretical Particle Physics

The Department of Physics, University of Alberta (www.phys.ualberta.ca) invites applications for two tenure-track faculty positions. One position will be in experimental particle physics, as part of our plan to expand into the areas of direct detection of dark matter, searches for neutrinoless double beta decay, and measurements of neutrino oscillations and properties, by exploiting the new Sudbury Neutrino Observatory Laboratory (SNOLAB). The second position will be in theoretical particle physics. We primarily seek candidates at the Assistant Professor level, but exceptional candidates at a more senior level will be considered. The start date for these positions is July 1, 2007.

Applicants must possess a Ph.D., have outstanding promise in research and be committed to teaching. The successful candidates will be expected to build a strong research program, supervise graduate students and teach at the undergraduate and graduate levels.

The Department of Physics has approximately 35 faculty and 115 graduate students. Our particle physics group includes members with research interests in collider physics, particle and nuclear

astrophysics, and the standard model and we plan to expand in both experimental and theoretical particle physics. The Department has excellent electronics, machine shop and computational facilities and staff, as well as access to high performance computational infrastructure (see www.westgrid.ca).

Initiatives by the Governments of Alberta and Canada provide exceptional opportunities for additional funding to establish new research programs at the University of Alberta. See, for example, www.albertaingenuity.ca, www.gov.ab.ca/sra, www.icore.ca, and www.innovation.ca for further information.

The application should include a curriculum vitae, a research plan, and a description of teaching experience and interests. The applicant must also arrange to have at least three confidential letters of reference sent to the relevant selection committee. For details about the positions and application procedures please see:

www.careers.ualberta.ca/opportunities or www.phys.ualberta.ca/jobs/ or contact the Department of Physics by e-mail at dept@phys.ualberta.ca.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. If suitable Canadian citizens and permanent residents cannot be found, other individuals will be considered. The University of Alberta hires on the basis of merit. We are committed to the principle of equity in employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities, and Aboriginal persons.

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For further information and a consultation on how *CERN Courier* can work for you, contact:

UK – Moo Ali
Tel: +44 (0)117 930 1264
E-mail: moo.ali@iop.org

Europe – Kathryn Zerboni
Tel: +44 (0) 117 930 1196
E-mail: kathryn.zerboni@iop.org

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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 post-doctoral 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 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 3, 2006.

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

Wilson Fellows Committee
Fermi National Accelerator Laboratory
MS122, Attention: Cathryn Laue
P.O. Box 500, Batavia, IL 60510-0500
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



UPPSALA
UNIVERSITET

Assistant Professor/Research Associate in Experimental Elementary Particle Physics with ATLAS at LHC

The High Energy Physics Collider Group of the Department of Nuclear and Particle Physics at Uppsala University in Sweden is involved in the ATLAS project at CERN's Large Hadron Collider (LHC). The Group has provided 300 of the 2000 SemiConductor Tracker (SCT) modules of the ATLAS central tracking system and is responsible for the build-up and operation of the SCT Detector Control System. The Group is currently pursuing an extensive program of physics simulation studies of the potential to discover the charged Higgs boson with ATLAS. For further information about the Group see <http://www4.tsl.uu.se/~Atlas/index.html> and about the Department <http://www.isv.uu.se>.

The Research Associate position can be held for a maximum of 4 years. The task of the appointee is to perform physics analysis of ATLAS data, which includes supervision of students at postgraduate level, and to participate in the operation of the ATLAS detector. The opportunity to teach at undergraduate and postgraduate level will be given. The candidate must have a PhD. Priority will be given to applicants who have completed their PhD within 5 years of the application deadline. The candidate should have the necessary skills and qualifications to teach physics undergraduate courses in Swedish or English. In the selection among the qualified applicants particular importance will be attached to scientific excellence in Elementary Particle Physics. Applicants with a successful record in simulation studies and data analysis of collider-based particle physics experiments will be given first priority.

The salary level is 27 000 SEK/month and upwards depending on qualifications.

A complete version of this advertisement is available at
<http://www.personalavd.uu.se/ledigaplats/engindex.html>.

The application must be written in English and be addressed to the Vice-Chancellor of Uppsala University and have reached the University Registrar, UFV-PA 2006/2060, Box 256, SE-75105 Uppsala, Sweden, fax +46 18 471 2000 by latest 2006-10-31. A fax should be followed by a signed original of the application sent within a week of the deadline. The applicant is required to submit two copies of documents and one copy of publications according to instructions found on the web site <http://www.teknat.uu.se/english/instructions.php>

For further information about the position, please contact Prof. Tord Ekelöf, phone +46 18 471 3847, e-mail Tord.Ekelof@tsl.uu.se



HEAD OF ELECTRONICS DEVELOPMENT GROUP

The Enrico Fermi Institute of the University of Chicago is searching for a Head of our Electronics Development Group (EDG). This group, which in addition to the Head includes two electronics engineers and support personnel, has a long history of designing innovative electronics for elementary particle physics and astrophysics experiments. Some recent projects include the front-end electronics for the ATLAS hadron calorimeter, the CDF silicon vertex trigger, and electronics for the QUIET cosmic microwave background experiment. Each of these projects employed high-speed digital and analog electronics.

The successful candidate should have extensive experience in project-level electronics design for high energy physics and/or particle astrophysics. The Head of the EDG plays a central role in developing creative strategies for systems, in addition to developing electronics designs that will meet the needs of experiments. Most projects are designed and built by a close collaboration of engineers and physicists, so the electronics group leader must be able to manage the group's professional staff as well as work effectively with physicists and graduate students. The use of EDA tools is an important part of our design process.

A bachelors' degree in electronics engineering is the minimum requirement but a Masters or Ph.D. is preferred.

Candidates should apply on-line at: <https://jobopportunities.uchicago.edu> where you will be asked to set up an academic profile. The requisition number for this posting is: 073799. They will be asked to supply the following documents:

- Your Curriculum Vitae
- Your bibliography of publications

Material provided on-line need not be sent to the Fermi Institute.

In addition, candidates should ensure that three letters of recommendation are sent to:

EDG Search Committee
The University of Chicago
Enrico Fermi Institute
5640 South Ellis Ave, RI-183
Chicago, IL 60637

Applicants who submit their materials by October 30, 2006 will be given priority consideration. Review of applications will begin at that time. The position will remain open until filled.

The University of Chicago is an Affirmative Action/Equal Opportunity Employer.



Harvard University ATLAS Postdoctoral Position

The Laboratory for Particle Physics and Cosmology (LPPC) at Harvard University has two openings for Postdoctoral Research Fellows with our DoE funded ATLAS group. Candidates interested in working on the CDF experiment during the early stage of their appointment will also be considered. The successful candidates will be expected to work on physics analysis topics, software development and detector commissioning. The Harvard ATLAS group has participated in the design, construction and commissioning of the precision muon chambers, and we plan to continue this work through commissioning of the detector. At CDF, we are interested in top physics and searches for the Higgs boson, and are also involved in the operations of the silicon detector and central drift chamber. For any questions regarding these openings please contact either Prof. Joao Guimaraes <guimaraes@physics.harvard.edu> or Prof. Masahiro Morii <morii@physics.harvard.edu>.

For these positions experience with state-of-the-art detector systems and with particle physics analysis software are required. Interested applicants should send their CV, a statement of interest, and three (3) letters of reference sent to:

Dr. George W. Brandenburg <brandenburg@physics.harvard.edu>, Director, Harvard University LPPC, 18 Hammond Street, Cambridge, MA 02138 (PDF files preferred).

Harvard is an equal opportunity, affirmative action employer.

**Johannes Gutenberg-Universität
Mainz**

Fachbereich 09 – Chemie, Pharmazie und Geowissenschaften –
Institut für Kernchemie

invite applications for the joint position of a

**Leading Scientist and University Professor (salary scale W2)
for the research area Heaviest Elements**

The salary is negotiable based on the scale W2 and qualifications of the applicant.

GSI Darmstadt and the University of Mainz provide a broad spectrum of research opportunities in the field of the heaviest elements. We are seeking an outstanding individual who will focus on the synthesis, nuclear structure, and atomic physics of the heaviest elements.

He/she will lead a research team at GSI and is expected to participate in the scientific program of GSI in close collaborations with the University of Mainz and other German and foreign research institutions. He/she will represent his/her area in teaching at the University of Mainz.

After the appointment to Professor at the University of Mainz, the successful candidate will be granted a leave of absence to GSI.

The advancement of women in the scientific field is an integral part of the university's and GSI's policy. Women, therefore, are especially encouraged to apply. Persons with disabilities will be given preference over other applicants with comparable qualifications.

Applications including the curriculum vitae, the list of publications, and research experience and teaching records should be sent until **November 15, 2006**, to:

**Johannes Gutenberg-Universität Mainz, Dekanat des Fachbereichs 09,
55099 Mainz, GERMANY**

and a copy to

**Prof. Dr. Karlheinz Langanke
Gesellschaft für Schwerionenforschung mbH
Planckstrasse 1, 64291 Darmstadt, GERMANY**

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These postdoctoral research fellowships are intended to attract outstanding young scientists to the University of Chicago at an early stage in their career. We expect to award two fellowships each year from a pool of international candidates. To date, there have been 93 such fellows, many of whom have gone on to careers as influential scientists.

The initial appointment is for one year, renewable annually, for up to three years. The appointment carries a salary of \$54,000 per annum with an additional allocation of up to \$6,000 for independent research support. Appointees are given the freedom of either working independently or associating with EFI faculty in a research area of common interest. Appointment would be at the University internal rank of Research Associate (Instructor). There are no teaching responsibilities with this position.

The Enrico Fermi Institute is an interdisciplinary research unit within the Division of Physical Sciences of the University of Chicago. The Institute's activities include the following: string theory and theoretical high energy physics, experimental high energy physics, theoretical astrophysics and cosmology, experimental astrophysics and space physics, infrared and optical astronomy, cosmic microwave background observations, general relativity, cosmochemistry, scanning electron & ion microscopy, secondary ion mass spectrometry.

One application is sufficient to be considered for both research fellowships.

Applying for the Enrico Fermi and/or the Robert R. McCormick Postdoctoral Research Fellowship at the rank of Research Associate (Instructor):

Candidates should apply on line at <https://jobopportunities.uchicago.edu>, using requisition number: 074051

They will be asked to supply the following documents:

- Curriculum Vitae
- Bibliography of publications and preprints
- Description of research interests to be pursued at the University

Material provided on-line need not be sent to the Fermi Institute

In addition, candidates should ensure that three letters of recommendation are sent to: **Enrico Fermi Institute, Office of the Director, 5640 S. Ellis Avenue, RI-183, Chicago, Illinois 60637** or by fax to (773) 702-8038. Letters should be from faculty members or senior research scientists who are active in the field of study in question. Applicants who submit their materials by November 10th will be given priority consideration. Review of applications will begin at that time and candidates will be notified of the results by late December.

Contact Nanci Carrothers at: n-carrothers@uchicago.edu in case of questions.

The University of Chicago is an Affirmative Action/Equal Opportunity Employer. It also participates in the Exchange Visitor Program and will facilitate the granting of visas to foreign applicants.

Associate Laboratory Director for Nuclear and Particle Physics

Brookhaven National Laboratory (BNL) is seeking candidates for the position of Associate Laboratory Director of its Nuclear and Particle Physics Directorate (NPP). This Directorate is one of five science Directorates at the Laboratory and contains both major research programs and accelerator and facility operations. The annual budget of the Directorate is about \$180 M with a staff of over 600.

The Associate Laboratory Director (ALD) is responsible for the scientific and managerial leadership of the Directorate. He/she reports to the Laboratory Director. The successful candidate must have a Ph.D. degree and a distinguished research career in the physics accompanied by proven experience in the management of a mid-sized research effort. BNL is interested in candidates who will develop internationally leading programs that are aligned with the mission of the Department of Energy, and who will maintain and enhance a world-class scientific and technical staff. The ALD is the primary contact with BNL's programs and facility sponsors, principally the U.S. Department of Energy.

The ALD participates at the Director's level in the Laboratory-wide planning for new programs and user facilities and has line responsibility for safe and environmentally sound operation of his/her program. Recent areas of scientific focus include relativistic heavy ion physics, spin physics, high energy physics at the LHC (ATLAS), neutrino physics together with operation of the RHIC complex, the Superconducting Magnet Division and the Instrumentation Division. New directions in expanding the range of QCD studies are envisioned.

BNL is a multi-disciplinary laboratory engaged in a broad scope of world-class basic and applied research in a highly stimulating and competitive science environment. It is managed by Brookhaven Science Associates under contract with the U.S. Department of Energy. Applications should be sent electronically to hempfling@bnl.gov, or by regular mail to **Bill Hempfling, Human Resources Division, Brookhaven National Laboratory, Bldg. 185, PO Box 5000, Upton, LI, NY 11973-5000**.

BNL welcomes diversity and encourages applications from all qualified individuals.



www.bnl.gov

RELAX... JOB-HUNTING DOESN'T NEED TO BE STRESSFUL

If you are looking for a job in high-energy physics, just visit [Jobs Watch](http://cerncourier.com/jobs) at cerncourier.com/jobs.

Leading institutions and companies in high-energy physics and related areas post their latest vacancies on **Jobs Watch**. Don't miss your dream job – sign up for the **e-mail alert** to receive information on new jobs direct to your inbox.

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Institute of Physics PUBLISHING



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SRF Accelerator Physicist (Structures & Simulations) And SRF Post Doc (2 positions)

Thomas Jefferson National Accelerator Facility (Jefferson Lab), located in Newport News, VA, USA, is a world-class scientific laboratory centered around a high-intensity, continuous wave electron beam, which provides a unique capability for nuclear physics research. The lab also has a pioneering FEL program and is active in ILC and other projects. The lab is managed for the Department of Energy by Jefferson Sciences Associates.

Jefferson Lab is currently seeking exceptional candidates for an **SRF accelerator physicist position** (Salary Range: \$62,100 - \$123,000) to provide simulations and measurement support to all ongoing SRF institute activities, which may include operational support of CEBAF and the FEL, cavity and cryomodule R&D, ILC support and production or new projects. The incumbent will provide a broad range of numerical simulation support for the development of new/improved SRF accelerating structures and components and perform general analysis and problem solving in support of various projects and programs. Minimum qualifications: PhD in Physics, preferably with specialization in RF simulation and measurements plus 5 years post PhD experience applying training in a laboratory environment. Direct experience designing, simulating, and testing cavities and components for accelerator applications and experience with characterization of RF structures via both bench measurements and state-of-the-art simulation software required. Candidate should be expert in the use and interpretation of 3D frequency domain and time domain RF simulation codes such as MAFIA, Microwave Studio, HFSS, etc. Experience with Finite Element Analysis or multi-physics tools, particularly ANSYS, is highly desirable.

In addition, the Lab seeks exceptional candidates for two **Post Doc positions** (Salary Range: \$44,200 - \$66,400) in the SRF Institute in the areas of Structures & Simulations or materials and processes to provide support to ongoing SRF institute activities including operational support of CEBAF and the JLab FEL, cavity and cryomodule R&D and production, ILC or new projects. Minimum qualifications: PhD in Physics or Engineering, preferably with an element of RF simulation or measurements, SRF materials or processing. Some experience in or familiarity with the simulation and RF measurement of accelerating structures and components for accelerators using codes such as MAFIA, Microwave Studio, HFSS, etc. and measuring instruments such as network analyzers desired.

For prompt consideration, reference position AR0826, AT0827 and AT829, respectively, and apply on-line at:
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UNIVERSITÄT DORTMUND

Im Fachbereich Physik
ist zum 01.10.2007 eine

Universitätsprofessur W2
für Theoretische Elementarteilchenphysik
zu besetzen.

Das Arbeitsgebiet der Bewerberinnen und Bewerber sollte auf dem Gebiet der theoretischen Elementarteilchenphysik mit Schwerpunkt Astroteilchenphysik (dunkle Materie, Materie-Antimaterie Asymmetrie, Teilchenproduktion und Signaturen kosmischer Neutrinos, teilchentheoretische Aspekte des frühen Universums, etc.) liegen.

Die Bereitschaft zur Zusammenarbeit mit den theoretischen und experimentellen Arbeitsgruppen (IceCube, Magic, ATLAS, LHCb, BaBar) vor Ort im Bereich der Teilchenphysik und Astroteilchenphysik wird erwartet. Eine Mitarbeit am interdisziplinären Forschungsband „Modellbildung und Simulation“ ist wünschenswert.

Von der Inhaberin/dem Inhaber wird die Beteiligung an der Lehre in allen Studiengängen des Fachbereichs Physik erwartet (Diplom bzw. Bachelor/Master in Physik und Lehramtsabschlüsse). Eine angemessene Beteiligung an der akademischen Selbstverwaltung wird erwartet.

Die Einstellungs Voraussetzungen richten sich nach § 46 HG des Landes NRW. Erwartet werden insbesondere hervorragende wissenschaftliche Leistungen, die bei Berufung in ein erstes Professorenamt durch erfolgreiche Tätigkeit als Juniorprofessorin oder Juniorprofessor oder im Rahmen einer Habilitation oder durch eine andere wissenschaftliche Tätigkeit erbracht worden sein können.

Die Universität strebt eine Erhöhung des Anteils der Frauen in Forschung und Lehre an und bittet deshalb Wissenschaftlerinnen nachdrücklich um ihre Bewerbung. Die Bewerbung geeigneter Schwerbehinderter ist erwünscht.



Bewerbungen mit Lebenslauf, wissenschaftlichem Werdegang, Schriftenverzeichnis und Angaben über die bisherige Lehrtätigkeit sind bis zum 10.11.2006 zu richten an den **Dekan des Fachbereichs Physik der Universität Dortmund, D-44221 Dortmund (Deutschland).**

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