

RECRUITMENT

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The Berliner Elektronenspeicherring-Gesellschaft für Synchrotronstrahlung (BESSY) and the Humboldt-Universität zu Berlin (HU Berlin) invite applications for a joint appointment as

Head of the Institute "Accelerator Physics"

at BESSY / HZB and

Full Professor (W3) for Accelerator Physics

at the Faculty of Mathematics and Natural Sciences I - Department of Physics of the HU Berlin.

By January 1, 2009, BESSY will merge with the Hahn-Meitner Institut Berlin to form the Helmholtz-Zentrum Berlin für Materialien und Energie (HZB). The new center will have about 1000 employees on two campuses in Berlin-Wannsee and Berlin-Adlershof. Main research areas are in materials sciences and in solar energy research. An essential part of the mission of the HZB is the development and operation of large scale user facilities for research with synchrotron radiation and neutrons - presently the 3rd generation synchrotron facility BESSY II and the research reactor BER II - and the participation in the research areas 'Structure of Matter' and 'Energy' of the Helmholtz-Association with special emphasis on magnetic materials, functional materials and solar energy conversion. Additionally HZB operates an accelerator for proton therapy of ocular melanomas.

The appointee is responsible for heading the institute "Accelerator Physics" which corresponds to the present accelerator physics department at BESSY. Within the HZB, this institute will have the central task to develop and operate the BESSY II storage ring source and to carry out a research program on future accelerator based photon sources. The candidate is expected to have an established international reputation in the field of accelerator physics. He/she will actively participate in the educational programmes at the Humboldt-University and have the potential to attract external funding for a creative research program. Participation in joint research projects is strongly encouraged.

The position will be available as of April 1st 2009. Both BESSY and HU Berlin are equal opportunity employers. The goal is to enhance the percentage of women in the areas where they are underrepresented. Women, therefore, are particularly encouraged to apply. Applications of disabled persons will be preferred in cases of equal qualifications. The legal requirements according to § 100 BerlHG must be satisfied. **Deadline for application: Oct. 21st, 2008**

Applications should be addressed to Prof. Dr. W. Eberhardt, BESSY, Albert Einstein Str. 15, 12489 Berlin. For further information Prof. Eberhardt can be contacted by e-mail (eberhardt@bessy.de)

Applicants are kindly asked to send their application materials both in written form as well as electronically via <http://www2.physik.hu-berlin.de/ssl/bessy>

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 October 31, 2008.

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



The Johann Wolfgang Goethe-University Frankfurt, Faculty of Physics invites applications to fill the following positions. These professorships are based in the Helmholtz International Center for the Facility for Antiproton and Ion Research (HIC for FAIR) funded through the Hessian state excellence initiative "LOEWE".

Full Professorship (W3) for Lattice Gauge Theory

An internationally renowned person representing the field of theoretical physics in its full breadth is sought. The applicants should especially engage in teaching theoretical physics and computational science in the bachelor and master programs of the department and support the teaching offered by the Helmholtz Graduate School for Hadron and Ion Research (HGS-HIRE).

The applicants are experts in the field of lattice gauge theory. Because of the connection to FAIR expertise in the treatment of quantum chromodynamics at finite temperatures and density and/or the description of exotic hadronic states is especially desired.

Full Professorship (W3) for Theoretical Astrophysics

An internationally renowned person representing the field of theoretical astrophysics in its full breadth is sought. The applicants should especially engage in teaching astronomy/astrophysics in the bachelor and master programs of the department and support the teaching offered by the Helmholtz Graduate School for Hadron and Ion Research (HGS-HIRE).

The applicants are expected to work in one or several of the following fields: stellar evolution, supernova dynamics, nucleosynthesis, physics of compact stellar objects, dynamics of neutron star collisions, exotic matter and phase transitions in the universe.

The applicants for both professorships should complement and extend the research profile of the physics department and strengthen it through the acquisition of third-party support. The willingness to collaborate in an interdisciplinary way with the researchers at "HIC for FAIR" and the physics department as well as skilled participation in teaching are expected.

The designated salary for the position is based on "W" on the German university scale or equivalent. Goethe-University stresses a family-friendly concept of workloads. Part-time engagement is possible. Reintegration into the job after parental leave is supported.

The Goethe University is committed to a pluralistic campus community through affirmative action and equal opportunity. For details see: www.uni-frankfurt.de/aktuelles/ausschreibung/professuren/index.html.

Applications accompanied by the usual information including a description of teaching experience as well as a concept for future teaching should be sent via e-mail **within 4 weeks** to the **Goethe-University, Dean of the Faculty of Physics, Max-von-Laue-Str. 1, D-60438 Frankfurt, Germany, dekanat@physik.uni-frankfurt.de**, with a copy to the **Scientific Director HIC for FAIR, Prof. Dr. C. Greiner, Institut für Theoretische Physik, Max-von-Laue-Str. 1, D-60438 Frankfurt, Germany, carsten.greiner@th.physik.uni-frankfurt.de**.

www.uni-frankfurt.de



PARTICLE PHYSICS.

DESY has openings for: Several Fellowships

DESY

DESY is one of the world's leading accelerator centres for investigating the structure of matter. DESY develops, builds and operates large accelerator facilities for photon science and particle physics.

The project / the position

Fellows in experimental particle physics are invited to participate in DESY's particle physics research:

- Analysis of HERA data
- Participation in the LHC Experiments ATLAS and CMS
- Preparations of the International Linear Collider ILC (accelerator and experiments)

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

Requirements

- A Ph.D. completed within the last 4 years
- Application including a resume and the usual documents (curriculum vitae, list of publications and copies of university degree)
- Three letters of reference shall be arranged to be sent to the DESY Human Resources Department

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 operates flexible work schemes. DESY is an equal opportunity, affirmative action employer and encourages applications from women. There is an English-speaking Kindergarten on the DESY site.

Please send your application quoting the reference code, also by E-Mail to:

Deutsches Elektronen-Synchrotron DESY

Human Resources Department | Reference code: 80/2008

Notkestraße 85 | 22607 Hamburg | Germany

Phone: +49 40 8998-3392 | E-Mail: personal.abteilung@desy.de

Deadline for applications: 15 October 2008

www.desy.de

The Helmholtz Association is Germany's
largest scientific organisation.
www.helmholtz.de



The Indiana University Cyclotron Facility (IUCF) is a multidisciplinary institution supporting research in Accelerator Physics, Condensed Matter and Materials Physics, Medical Physics and Nuclear Physics and Chemistry. IUCF is also developing two major new research facilities – The LENS Neutron Source and the ALPHA electron storage ring. LENS is a pulsed neutron source supporting the study of large scale structures and neutron radiation effects testing. ALPHA will consist of a 60 MeV long pulse LINAC and electron storage ring to support accelerator physics research, radiation effects testing and the development of an Inverse Compton Scattering X-ray source. Several positions are now available to support these research and development activities at IUCF.

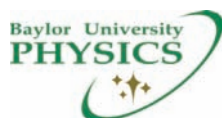
Postdoctoral Position in Accelerator Physics (1) – to participate in the design, construction and commissioning of the LINAC and Storage Ring. The successful candidate will have a PhD in Accelerator Physics, Nuclear Physics or Electrical Engineering. Experience with electron LINACS, vacuum systems, and controls is highly desirable.

Postdoctoral Position in Accelerator Physics (2) – to participate in the development of optical diagnostics for electron beams based on laser wires and Inverse Compton Scattering. The successful candidate will have a PhD in Accelerator Physics, Nuclear Physics, Condensed Matter Physics or Optics. Experience with lasers and optical systems is essential.

Staff Position in Accelerator Physics – to support the development of a high intensity electron linear accelerator and storage ring facility. The successful candidate will have a PhD in accelerator physics or related field and a minimum of five years experience in an accelerator laboratory environment. The candidate will have a demonstrated ability to lead a team of scientists, engineers and technicians to design, deploy and commission a synchrotron and must have a working knowledge of accelerator operations, accelerator controls, and beam diagnostics. Experience in electron accelerators is a strong asset. Applicants for this position should apply online at <http://www.indiana.edu/~uhrs/jobs/index.html>.

Interested postdoctoral applicants should send a CV and a statement of research interests, along with 3 names for reference to: **Dianne Dupree, IUCF, 2401 Milo B. Sampson Lane, Bloomington, IN 47408**, or to didupree@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. Applications will be reviewed until a suitable candidate is identified.



The Department of Physics, Baylor University, invites applications for two tenure-track faculty positions at the level of Assistant Professor beginning in August 2009.

The Department is seeking to hire one candidate in experimental high energy physics. Exceptional candidates in other research areas will be considered for the second tenure-track position. Current areas of departmental research include elementary particle physics, astrophysics, dusty plasma physics, condensed matter physics, surface physics, nonlinear dynamics, semiconductor physics, experimental atomic and molecular physics, and theoretical early universe cosmology and string/M theory. Applicants should submit (1) a cover letter, (2) a curriculum vitae including a list of refereed papers published and submitted, (3) a statement of current research interests and pursuits, (4) a statement on teaching interests and philosophy, and (5) a list of three references. Applicants should arrange to have three letters of recommendation sent directly to **Chair, Search Committee, Department of Physics, Baylor University, One Bear Place #97316, Waco, Texas, 76798-7316, USA** or e-mailed to physicsjob@baylor.edu. Salary is commensurate with experience and qualifications. To ensure full consideration for the position, applications should be completed by November 1, 2008. Applications will be accepted until the position is filled.

Baylor, the world's largest Baptist university, holds a Carnegie classification as a "high-research" institution. Baylor's mission is to educate men and women for worldwide leadership and service by integrating academic excellence and Christian commitment within a caring community. Baylor is actively recruiting new faculty with a strong commitment to the classroom and an equally strong commitment to discovering new knowledge as Baylor aspires to become a top tier research university while reaffirming and deepening its distinctive Christian mission as described in Baylor 2012 (<http://www.baylor.edu/vision/>).

Baylor is a Baptist university affiliated with the Baptist General Convention of Texas. As an AA/EEO employer, Baylor encourages minorities, women, veterans, & persons with disabilities to apply.

The University of Manchester Particle Physics Group congratulates all at CERN on the commissioning of the LHC. Particle Physics has been a part of Manchester since Ernest Rutherford discovered the atomic nucleus here in 1911. We are proud to be part of the coming discoveries, and hope they will have an equally far-reaching impact on our understanding of nature.



CERN, founded in 1954 in Geneva, is the world's most advanced fundamental research institute for particle physics. Over the last 50 years, it has become a prime example of international collaboration with currently 20 European Member States.

The Electrical Engineering Group (EL) of the Technical Support Department (TS) has the mandate to design, procure and operate CERN's electrical power distribution networks. The CERN electrical networks, supplied by 130 kV and 400 kV lines respectively from Switzerland and France, provide electrical power to a number of high-energy particle accelerators, large scale experimental areas, the Organization's computer centre and many office buildings on the various sites. The installed electrical power at the 18 kV level is rated at approximately 500 MVA. CERN is currently looking for a

Senior Electrical Engineer

Electrical power distribution

to **lead the Electrical Engineering Group** (Reference: TS-EL-2008-15-LD) as well as other

(Senior) Electrical Engineers.

We offer a limited duration contract for a period of 4 years. Its holder may be subsequently considered for the award of an indefinite contract or an extension of the limited duration contract may be granted. CERN is an equal opportunities employer offering challenging work, competitive tax-free salaries, relocation package (where applicable) and comprehensive social benefits in a stimulating environment.

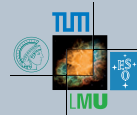
For detailed descriptions of the above vacancies and the application procedure please refer to our website <https://ert.cern.ch>.

You can also obtain additional information by contacting the responsible Human Resources Advisor: michael.dorn@cern.ch.



The Excellence Cluster for Fundamental Physics

'Origin and Structure of the Universe'



The Cluster of Excellence 'Origin and Structure of the Universe' is a joint research project at the Garching Campus of the Technical University Munich funded by the Excellence Initiative of the Federal Government of Germany. It represents a co-operation by the physics departments of the Technical University Munich and the Ludwig-Maximilians University, four Max-Planck Institutes (MPA, MPE, MPP, IPP) and ESO. The main goal of the Cluster is to solve fundamental questions of astrophysics and cosmology (big bang, dark energy, dark matter, black holes, fundamental forces, nucleosynthesis etc.). The Excellence Cluster Universe provides a unique interdisciplinary research platform for astrophysicists, particle and nuclear physicists to face these challenges and find solutions. We are looking for

- **RESEARCH FELLOWS**
- **POSTDOCTORAL RESEARCHERS**
- **DOCTORAL STUDENTS**

In the **FELLOW PROGRAM** we search for excellent young scientists (experienced postdocs). Fellows are free to choose their own research field although an interest in strong collaboration with existing research groups is expected. The duration for contracts is two years. Fellows receive their own budget for running costs.

POSTDOCTORAL RESEARCHERS will work in specific groups and in well-defined projects, outlined in more detail in the specific job description on our website.

DOCTORAL STUDENTS will be assigned to specific projects and supervisors. The students will be enrolled at the respective supervisor's University that will also award the doctoral degree in physics. Doctoral students will follow a structured PhD program with their scientific progress being monitored by two independent advisors. The duration of the PhD program is three years.

Candidates of all groups are chosen in a competitive manner. They will benefit from the outstanding scientific infrastructure at the Garching Campus and the team-oriented, interdisciplinary work atmosphere. They will also be involved in transregional and international research activities. Furthermore, regular seminars, conferences and our extensive visiting-scientists program offer excellent opportunities for researchers to broaden their scientific horizon and embark upon new collaborations.

The advancement of women in science is an integral part of the Cluster's and the University's policy. Therefore, women are especially encouraged to apply. Persons with disabilities will be given preference to other applicants with equal qualifications.

Application

Details on job vacancies and research of the Cluster can be found on our website www.universe-cluster.de. Applicants should complete the web-based application form in the respective jobs description (-> **jobs button**). Here you also find further information on deadlines and the application documents required.

Contact

Technische Universität München · Excellence Cluster Universe
Dr. Andreas Müller · Boltzmannstrasse 2
85748 Garching · Germany



UCL

University College London High Energy Physics

The heart of physics in the heart of London

With strong involvement in ATLAS, as well as collider and neutrino experiments worldwide, plus particle phenomenology, we are an outstanding place to study for postgraduate degrees in particle physics. A limited number of places on Masters and PhD courses are available each year.

See <http://www.hep.ucl.ac.uk/postgrad/> for more details.

With over 27,000 staff and students, UCL is ranked third in Europe and 22nd worldwide*

*ref: Institute of Higher Education, Shanghai Jiao Tong University, 2008



TWO TENURE TRACK FACULTY POSITIONS

Experimental and Theoretical High Energy Physics

Florida State University

The Florida State University Physics Department is seeking applicants for two tenure track Assistant Professor positions starting in Fall 2009.

One position is in theoretical high energy physics, where current group interests include calculations of higher order QCD effects in collider physics, heavy quark phenomenology, determinations of parton distribution functions, and lattice field theory. We are seeking candidates with a strong background in theoretical high energy physics and experience in collider phenomenology. Interest and experience in areas of astroparticle physics, while not required, would also be welcomed.

The second position is in experimental high energy physics to work on the CMS experiment. The successful applicant will take an immediate leadership role in one or more projects within the collaboration and initiate a substantial physics research program.

Applicants should send a letter of interest, a curriculum vitae with a list of publications, a research plan, and arrange for at least three letters of recommendation to be sent to: **Physics Department, Florida State University, Tallahassee, Florida 32306-4350**. Please address applications for the theory position to Prof. Laura Reina and those for the experimental position to Prof. Harrison Prosper.

Review of applications will begin October 15, 2008 and continue until the position is filled.



Florida State University has a diverse student body and is committed to a faculty that reflects this. Florida State University is an Equal Opportunity/Affirmative Action Employer, and it especially encourages applications from women and members of minority groups.

NSLS-II

The National Synchrotron Light Source II - Brookhaven National Laboratory

The National Synchrotron Light Source II (NSLS-II) is a major US science facility to be located at Brookhaven National Laboratory on Long Island, within easy reach of New York City. It will produce photons over a wide energy range, from infra-red to hard x-rays, used for diverse, leading-edge, scientific research including energy technologies, environmental science and new materials in extreme environments, as well as biological sciences and drug discovery. The construction is expected to commence at the start of 2009 with a budget in excess of \$900M.

www.bnl.gov/nsls2

Brookhaven National Laboratory invites applications from scientists, engineers, and professionals with leading expertise who are interested in playing a significant role in the design, construction, and scientific utilizations of NSLS-II.

Recruitment efforts are currently underway in the following areas:

- Accelerator Physics
- Scientific programs (Nanoprobe, Coherent Soft X-ray, & Powder Diffraction)
- Mechanical Engineering & Design
- High Power RF Systems
- Control System Applications
- Information Technology
- Diagnostics & Instrumentation
- Construction Inspectors
- X-Ray Optics & Nanopositioning

Brookhaven National Laboratory is an equal opportunity employer committed to work force diversity.

Please see <http://www.bnl.gov/nsls2/jobs.asp> for a current listing of open positions and to apply on-line using the BNL Candidate Gateway.



EOE



The European
Light Source

European Synchrotron Radiation Facility



The European Synchrotron Radiation Facility (ESRF) is Europe's most powerful light source. It offers you an exciting opportunity to work with international teams using synchrotron light in Grenoble, in the heart of the French Alps.

We are seeking to recruit the:

Head of the Instrumentation Services and Development Division

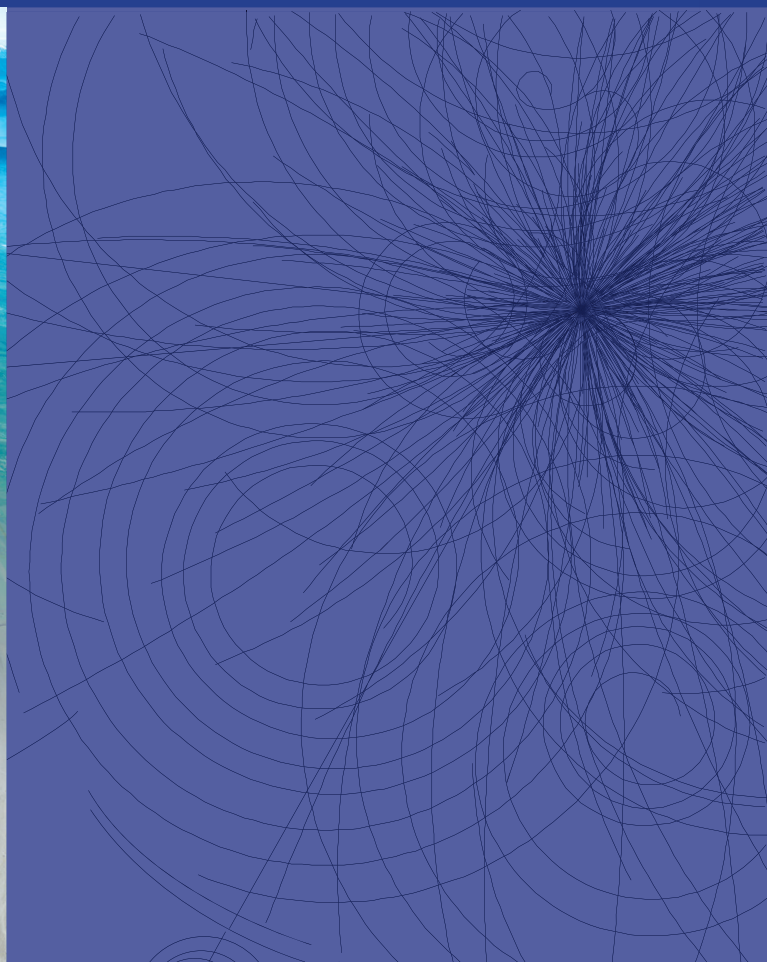
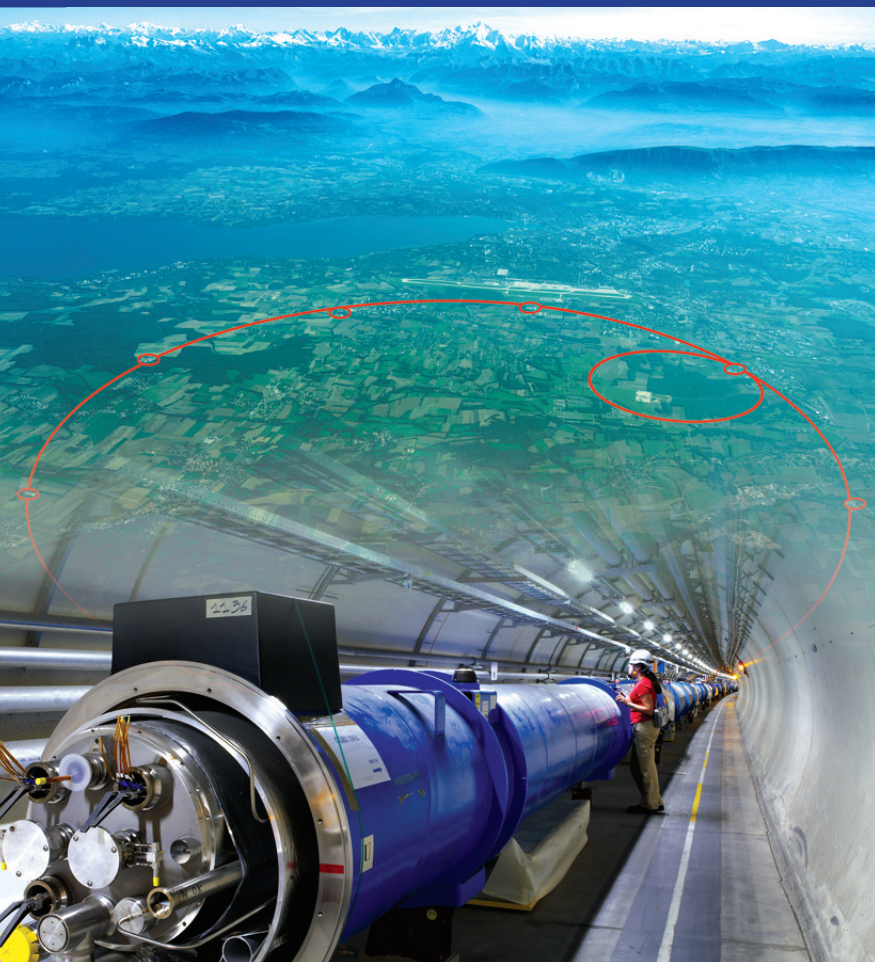
The new Instrumentation Services and Development Division (ISDD, 130 staff) will be responsible for the design, construction and support of instrumentation at the ESRF. Ensuring the optimal performance of the division, you will:

- Manage the heads of the different groups, including Electronics and Detectors, Mechanical Engineering, Scientific Software, Beamline Instruments, Software Support, Sample Environment Support and Chemistry
- Implement our new project management structure
- Follow the progress of major projects
- Manage the Division's budget
- Represent the ISDD on the Board of ESRF Directors and liaise with other appropriate units and groups of the ESRF
- Promote the ESRF at conferences and workshops

This senior position offers exciting opportunities for personal development and for involvement in resolving technical challenges.

For further information please consult: <http://www.esrf.fr/Jobs/Directorate/8001>

Interested candidates may send a fax (+33 (0)4 76 88 24 60) or e-mail (recruitm@esrf.fr) with their address, to receive an application form, which can also be printed from the web. Deadline for applications: 15 October 2008



Student Programmes

Opportunities in physics, engineering and computing

How about spending a remunerated training period in an exciting multidisciplinary and multicultural environment together with the most respected groups and highly recognized scientists from all over the world?

Fellowship Programme

Particle physics research and a broad range of applied science, computing and engineering opportunities

Boost your career and contribute your ideas to the Organization! Have you recently graduated from university or an advanced technical institute? Are you interested in working for one or two years in an international environment at the forefront of research?

Staff Employment at CERN

Opportunities ranging through the phases of R&D, design, production, operation and maintenance.

Are you qualified in computer science, electronics, physics, electricity, radio-frequency, cryogenics, ultrahigh vacuum, radiation protection, cooling and ventilation, operation of accelerators or superconductivity? CERN recruits around 100 engineers, technicians and applied physicists each year.

For more information please refer
to our website
www.cern.ch/jobs
or contact us:
recruitment.service@cern.ch



European Organization for Nuclear Research
Organisation européenne pour la recherche nucléaire

www.cern.ch



POST-DOCTORAL FELLOWSHIPS FOR NON ITALIAN
CITIZENS IN THE FOLLOWING RESEARCH AREAS

**THEORETICAL PHYSICS (N. 15)
EXPERIMENTAL PHYSICS (N. 20)**

The INFN Fellowship Programme 2008/2009 offers 35 (thirty five) positions for non Italian citizens for research activity in theoretical (n. 15) or experimental physics (n. 20).

Fellowships are intended for young post-graduates who are under 35 years of age by **November 15, 2008**.

Each fellowship, initially, is granted for one year and then, may be extended for a second year.

The annual gross salary is EURO 28.000,00.

Round trip travel expenses from home country to the INFN Section or Laboratory will be reimbursed, also lunch tickets will be provided for working days.

Candidates should choose at least two of the following INFN sites, indicating their order of preference.

- **INFN Laboratories:** Laboratori Nazionali di Frascati (Roma), Laboratori Nazionali del Gran Sasso (L'Aquila), Laboratori Nazionali di Legnaro (Padova), Laboratori Nazionali del Sud (Catania);

- **INFN Sections in the universities of:** Bari, Bologna, Cagliari, Catania, Ferrara, Firenze, Genova, Lecce, Milano, Milano Bicocca, Napoli, Padova, Pavia, Perugia, Pisa, Roma La Sapienza, Roma Tor Vergata, Roma Tre, Torino, Trieste.

The research programs, must be focused on the research fields of the Section or Laboratory selected (<http://www.infn.it>).

Applications, in electronic form, must be sent to INFN no later than **November 15, 2008**.

To register, candidates must use the website
<http://www.ac.infn.it/personale/fellowships/>

The application form requires:

- statement of research interests;
- curriculum vitae;
- three reference letters (specifying name, surname and e-mail of each referee).

Theoretical fellowships must start from September to December 2009. Requests for starting earlier accepted.

Experimental fellowships must start no later than April 2009. Requests to participate accepted.

ISTITUTO NAZIONALE DI FISICA NUCLEARE
IL PRESIDENTE
(Prof. Roberto Petronzio)



Lead physicist – Le Bourget du Lac, France

Scantech is an international company specialized in advanced on-line measurement and control systems for industrial applications. Our head office is located in France, about 1 hour drive from CERN, with additional sites in the Peoples Republic of China and the US.

We require a Physicist/Engineer with a suitable background in radiation sensors and detection systems to head our research and development department. The successful candidate will be qualified preferably to PhD level.

Working on our French site, in direct collaboration with company management, you will contribute to the creation of a new generation of innovative, market leading products. An important part of our product range is based on X-ray interactions: photoelectric absorption, fluorescence and backscattering. Therefore, the successful candidate should possess a real understanding of the underlying physics of ionizing radiation and in particular of x-rays. Experience in software development is also desirable.

You will have a degree in physical science or equivalent experience with a proven track record of successful development. You will intervene on the complete development cycle: design, dimensioning and specification of the equipment, choice and follow-up of suppliers, machine reception and support to end-customers. Knowledge of French and/or English is required.

Negotiable salary and benefits package.

To apply, please e-mail your CV and contact details to jan.gaudaen@scantech.fr or send them to Jan Gaudaen, Scantech, Savoie Technolac - BP244, 73374 Le Bourget du Lac, France
Phone +33(0)479252265

cerncourier.com

Universität Heidelberg. Zukunft. Seit 1386.



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) Fundamental Interactions 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>.

The branch Astronomy & Cosmic Physics is the International Max Planck Research School (IMPRS) for Astronomy and Cosmic Physics at the University of Heidelberg (<http://www.mpia.de/imprs-hd>). Astronomy students accepted into the Graduate School will automatically be members of the IMPRS-HD and conversely. Membership in the IMPRS for Quantum Dynamics in Physics, Chemistry and Biology (<http://www.mpi-hd.mpg.de/imprs-qd>) is envisaged if appropriate.

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

Applications for scholarships should arrive by December 13, 2008. Applicants have to initiate their application registering via a web form available at
<http://www.fundamental-physics.uni-hd.de/scholarships.php>.



Florida Institute of Technology

Research Engineer (Electronics)

Frontend and Readout Electronics for Particle Detectors

The Department of Physics and Space Sciences at Florida Institute of Technology in Melbourne, Florida seeks an experienced electronics or electrical engineer to join a project researching muon tomography of cargo with advanced micropattern gaseous detectors, e.g. GEM detectors. The engineer will lead the design, development, testing, and commissioning of charge-sensitive frontend amplifiers and digital readout electronics for experimental tests of a detector system with a large number of channels. Applications are welcome from candidates with an M.S. degree (or higher) in electronics/electrical engineering and at least three years relevant experience or with a B.S. degree and at least five years relevant experience. The successful candidate has experience developing and debugging fast analog amplifiers, ADCs, designing and testing boards using VME bus or similar, and interfacing detector readout structures (strips, pixels) and electronics. Preference will be given to an engineer with experience in a high-energy physics or nuclear physics environment. The engineer will play a central role in the project and is expected to work closely with physicists and students.

Interested candidates are requested to submit their CV, list of publications, description of involvement in relevant development or research projects, and contact information for at least two references, to **Prof. Marcus Hohlmann** by e-mail ONLY at hohlmann@fit.edu.

Florida Institute of Technology (www.fit.edu) is a leading private academic research institution in the Southeastern U.S. located near NASA's Kennedy Space Center and is an EO/AA Employer.



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) underway in parallel. 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, 2008 and will continue until all positions have been filled.

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

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Those of us at the
University of Virginia
in the
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and the
Institute for Nuclear and Particle Physics
wish to congratulate CERN
on the startup of the
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When UVa was founded nearly 200 years ago by Thomas Jefferson, one of the eight original professorships was in natural philosophy and focused on the physics of the day. At UVa today, there is a large community of physicists, many working on subatomic physics. We are proud that our research program includes a substantial investment in CMS, an involvement we look forward to maintaining for many years to come.

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The Cockcroft Institute
of Accelerator Science and Technology



The Cockcroft Institute congratulates our colleagues at CERN and its leadership for making the Large Hadron Collider a reality. In celebration of its success, the Cockcroft Institute has signed a comprehensive Agreement of Collaboration with CERN and has created special

OPPORTUNITIES for GRADUATE and POST-GRADUATE RESEARCH in ACCELERATOR SCIENCE and TECHNOLOGY

In developing accelerator systems and particle beams of protons, antiprotons, neutrons, ions, electrons, positrons, muons, neutrinos and photons of unprecedented reach in precision, luminosity and energy to serve, support and bring out the full potential and scientific reach of the comprehensive integrated accelerator complex at CERN and facilities in the UK, their future upgrades and transformations for research in fundamental sub-atomic physics.

Potential doctoral students and post-doctoral research assistants recruited by the Cockcroft Institute will have the unique opportunity to receive mentorship from existing Cockcroft Institute faculty members, augmented by its most recent faculty additions, at any of its three research-led partner Universities of Liverpool, Manchester and Lancaster and senior scientists from the partnering institution STFC, teaming up with senior scientist mentors from CERN. Opportunities exist for advanced research in accelerator physics and technology for LHC and its upgrades including a possible large hadron electron collider, for TeV scale electron-positron colliders (CLIC) and accelerators for research with heavy ions, neutrinos, muons, anti-matter and photons.

Prospective students and post-doctoral fellows should send in a complete CV, list of publications, a statement of research interest and three names of reference by post or electronically to:

Operations Manager: Ms. Liz Mason
The Cockcroft Institute
Keckwick Lane
Daresbury Science and Innovation Campus
Daresbury, Warrington
WA4 4AD
United Kingdom

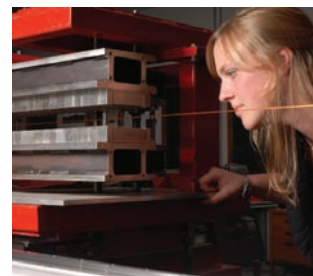
Email: e.a.mason@dl.ac.uk **Deadline December 31, 2008**

The Cockcroft Institute is a newly created international centre for accelerator science and technology in the UK. It is a joint venture between the Universities of Lancaster, Liverpool and Manchester, the Science and Technology Facilities Council (STFC at the Daresbury and Rutherford Appleton Laboratories) and the North West Development Agency (NWDA). The Institute is located in a purpose-built building on the Daresbury Science and Innovation Campus adjacent to the Daresbury Laboratory and the Daresbury Innovation Centre, and has established satellite centres in each of the participating universities.

The Institute is named after late Sir John Cockcroft FRS, who shared the Nobel Prize in Physics with Ernest Walton in 1951 for "splitting the atom" in 1932. Born in Todmorden in northwest England, educated in part in Manchester and Cambridge, and working alongside scientific giants like Lord Rutherford and Sir James Chadwick, he is regarded as the pioneer of modern accelerator research, initiating and helping establish many major national and international laboratories around the world such as the Rutherford Appleton Laboratory and CERN.

The Cockcroft Institute was officially opened by the then UK Minister for Science, Lord Sainsbury, in September 2006.

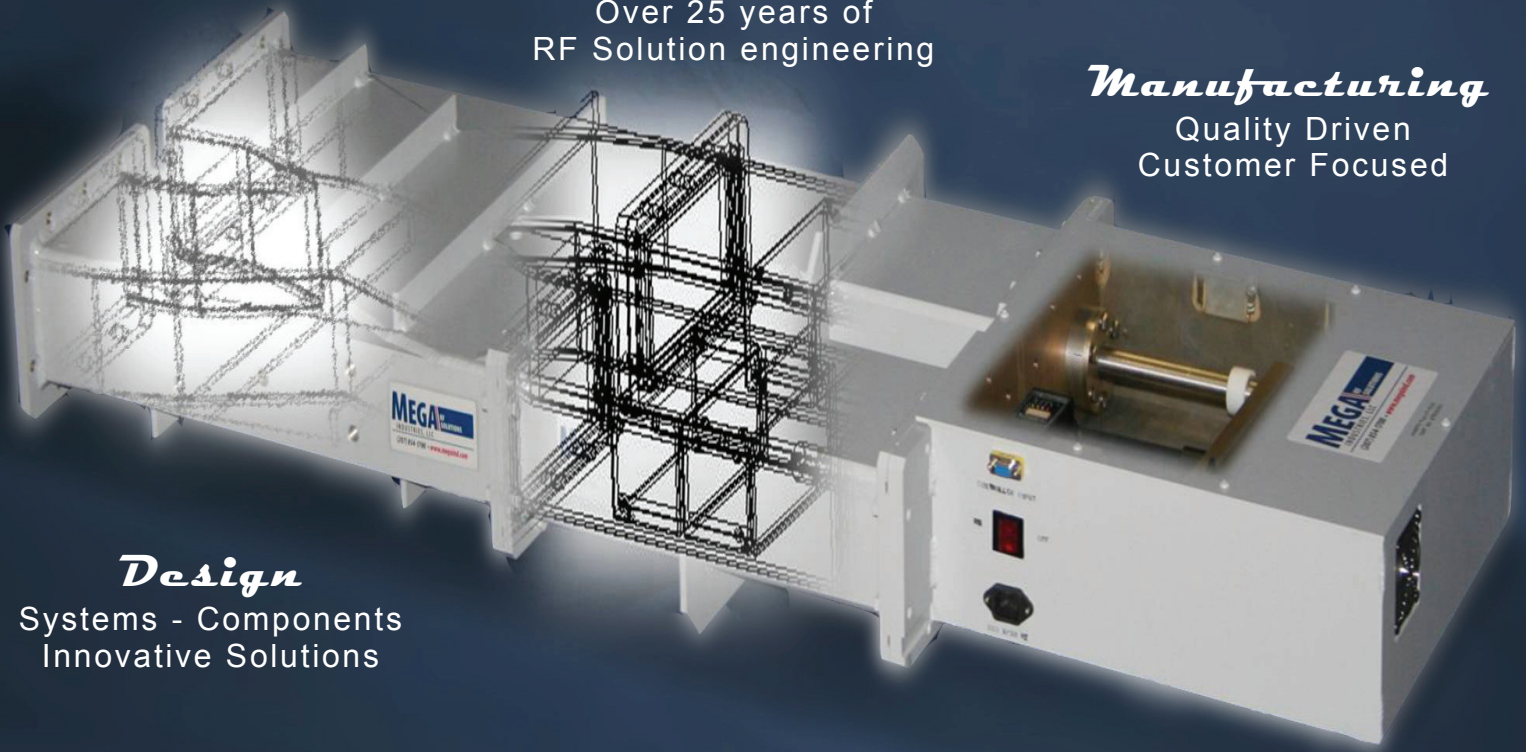
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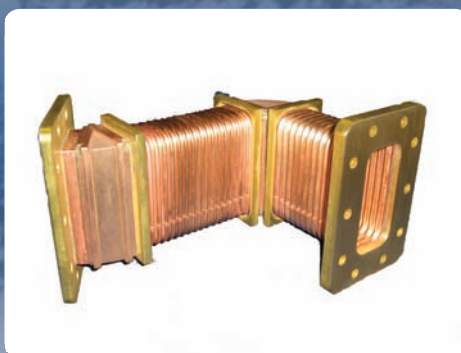
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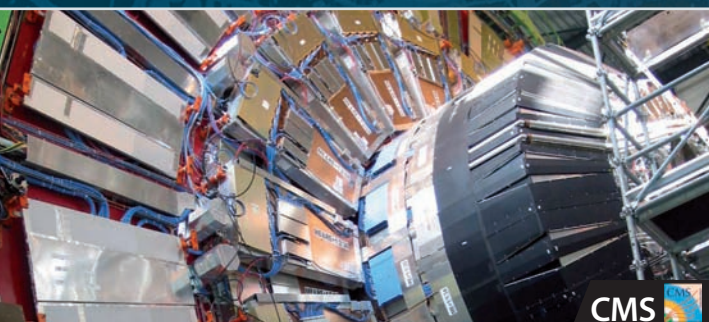


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