

RECRUITMENT

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European Molecular Biology Laboratory, EMBL, an international research organisation, is planning to build an integrated facility for structural biology at the future PETRA III ring at DESY, Hamburg (Germany). The expected X-ray optical properties will allow the operation of world class synchrotron radiation beamlines. The initial phase of the project includes the construction of two beamlines in macromolecular X-ray crystallography and one in small angle X-ray scattering of biological material. These facilities will be complemented by an integrated area for biological sample preparation and characterisation and high-throughput crystallisation.

Technical Staff for EMBL@PETRA III

Software Engineers (CC/06/141)

To support scientists and engineers in the design and implementation of the integrated beamline control as well as data acquisition systems and front-end application software. Applicants should have a masters degree (or equivalent) in Computing or a related discipline. Experience in application programming using C++, C# or Labview for scientific instruments preferably at synchrotron radiation beamlines is essential. Software development experience for control systems on distributed, heterogeneous computing platforms (e.g. TINE, EPICS) is desirable. The ideal candidate would have a background in hardware driver development and/or fieldbus systems (e.g. CANopen, EtherCAT) and/or motion control electronics and experience in automation and robotics would be advantageous.

Mechanical Engineers (CC/06/139)

To participate in the construction of the planned experimental facilities. Tasks will range from the integration of single X-ray optical elements into the synchrotron beamline layout to the design and installation of entire instruments. They will support scientists in finding technical solutions for complex experimental problems. Applicants should have a masters degree (or equivalent) in Mechanical Engineering, Physics Engineering or a related discipline. They should have demonstrated experience in working with X-ray equipment, vacuum systems, precision mechanics, 3D CAD software. Experience with synchrotron radiation beamline instrumentation, finite element analysis and project oriented work would be advantageous.

EMBL is an inclusive, equal opportunity employer offering attractive conditions and benefits appropriate to an international research organisation.

More detailed job descriptions can be viewed at www.embl.org/jobs

To apply, please email a curriculum vitae and the names and addresses of three referees, quoting the corresponding ref. no. in the subject line, to:
application@embl.de
by December 3rd, 2006.

EMBL, Personnel
Postfach 10.2209
D-69012 Heidelberg
Germany
Fax: +49 6221 387555

www.embl.org

IFMIF – EVEDA (International Fusion Materials Irradiation Facility – Engineering Validation Engineering Design Activities)

The European Union and the government of Japan have decided to sign an agreement for the joint implementation of a number of activities under the label “Broader Approach” activities”, contributing to jointly develop fusion power. Amongst them, there are the IFMIF-EVEDA activities, in view of constructing IFMIF, an intense 14 MeV neutron source, to test fusion relevant materials.

The European Union is in charge of the accelerator part of the EVEDA system and also of the design of the IFMIF accelerator. A management team for the accelerator will be set up and situated at Saclay, France, on one of the CEA site.

Project Office for the IFMIF-EVEDA Accelerator Project

The Accelerator management team is looking for a project control engineer, to define and implement the best project management practices to meet a challenging schedule. The activities will include:

- Defining the project management tools that will be used internally to manage the project and report to the project directorate and the EVEDA Steering Committee
- Maintaining the project management plan on behalf of the Project Leader
- Maintaining a reliable planning for the project
- Defining and implementing a reliable and effective documentation management system
- Supporting the project leader and the international partners in establishing common procurement rules for the project.

Safety Engineers for the IFMIF-EVEDA Accelerator Project

The accelerator management team is looking for a specialist in nuclear safety to work closely with the project team on the preparation of the safety case for the prototype accelerator to be constructed in Japan and for the final IFMIF accelerator.

The activities will include:

- Working closely with the accelerator technical team to prepare the safety case of the EVEDA accelerator and its interfaces
- Interfacing with the EVEDA Project team in Japan to write the nuclear safety documents for the Japanese nuclear authorities;
- Preparing the nuclear safety case, along with the design team, for the IFMIF accelerator.

System Engineers for the IFMIF-EVEDA Accelerator Project

The accelerator management team is looking for several professionals for a local team on system engineering for the accelerator.

The activities will include:

- Reviewing and up-dating the design of the EVEDA accelerator;
- Reviewing and validating the technical specifications for the industrial contracts;
- Managing the configuration control of the system;
- Preparing the integration phase on the experimental platform at Saclay;
- Preparing the installation and commissioning at Rokkasho;
- Defining and implementing a reliable Quality System for the project
- Managing the project risks
- Preparing the IFMIF accelerator full design report;



For further information and to apply for the above positions please contact acgouze@cea.fr or micolon@cea.fr



HadronPhysics I3 Study of Strongly Interacting Matter

European Commission

Transnational Access to Research Infrastructures

The Integrated Initiative "HadronPhysics I3", financed by the European Commission and coordinated by the Istituto Nazionale di Fisica Nucleare, Laboratori Nazionali di Frascati, Italy, combines in a single contract several activities, Networking, Research Projects and Transnational Access. The Transnational Access activity involves 9 infrastructures among those operated by the participants in HadronPhysics I3. Its objective is to offer the opportunity for European research teams, performing or planning a research project at these infrastructures, to

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to these infrastructures, to cover subsistence and travel expenses.

The only eligible teams (made of one or more researchers) are those that conduct their research activity in the EU Member States or in the Associated States. Information about the modalities of application and the **Calls for Proposals** can be obtained by visiting the web site of each infrastructure:

- A1. INFN-LNF, <http://www.lnf.infn.it/cee/tarifp6/>
- A2. DESY-HERMES, <http://www-hermes.desy.de/I3HP-TA-HERMES/>
- A3. FZJ-COSY, <http://www.fz-juelich.de/ikp/tmr-life.html>
- A4. FZJ-NIC/ZAM, <http://www.fz-juelich.de/nic/i3hp-nic-ta/>
- A5. GSI-SIS, http://www.gsi.de/informationen/users/EC-funding/I3/SIM_e.html
- A6. U Mainz-MAMI, <http://www.kph.uni-mainz.de/en/eu/>
- A7. ZIB, <http://www.zib.de/i3hp>
- A8. LU-MAXLAB, <http://www.maxlab.lu.se/kfoto/eu/MAXlabproposalsI3HP.html>
- A9. UU-TSL, <http://www.tsl.uu.se/infrastr.htm>

This announcement can also be found at the following URL: <http://www.infn.it/eu/i3hp>

LEDERMAN FELLOWSHIP in EXPERIMENTAL PARTICLE PHYSICS or ACCELERATOR PHYSICS

The Fermi National Accelerator Laboratory (Fermilab) has an opening for a postdoctoral Lederman Fellow in experimental particle physics or accelerator physics. We are looking for candidates who have demonstrated outstanding ability in research. In recognition of Leon Lederman's commitment to the teaching of physics at all levels, the successful candidate will be also expected to participate, for a fraction of his/her time, in physics outreach. The Lederman Fellow will have a choice of opportunity within the broad program of experimental research at Fermilab which includes experiments at the energy frontier, neutrino physics, particle astrophysics and accelerators. See <http://www.fnal.gov/> for more information.

Candidates should have obtained a Ph.D. in experimental particle or accelerator physics after November 15, 2005. The appointment is normally for three years with an extension possible. To apply, write to: Dr. Vaia Papadimitriou (Chair of Lederman Fellowship Committee), Fermi National Accelerator Laboratory, MS 306, P.O.Box 500, Batavia, IL 60510-0500 or vaia@fnal.gov. Applicants should send a letter including their research experience and noting any experience or interest in teaching and outreach, curriculum vitae, publication list and the names of at least four references. Applications will be accepted through January 5, 2007.



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

Research Associate ERL Cornell University

A Research Associate position in accelerator physics is available at Cornell Laboratory for Accelerator-based Sciences and Education (CLASSE). Cornell University is actively pursuing development of Energy Recovery Linac (ERL) as a next generation hard X-ray source facility. The fully funded program is under way to build ultra-high brightness high current electron source key to a future ERL. Cornell University is renowned for its expertise in various aspects of accelerator physics and maintaining worldwide leadership in accelerator technology.

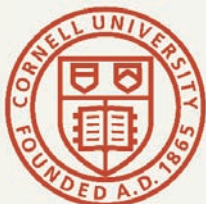
The successful candidate will participate in diverse activities aimed at demonstrating superb performance of the ERL electron source including theoretical, computational and experimental work. A PhD in physics is required. Candidates are expected to have already gained some experience in one or more of the following fields: accelerator physics, beam diagnostics, vacuum and radio-frequency (RF) techniques, particle-in-cell (PIC) computer simulations. The position can be filled immediately.

Applicants should arrange their CV, list of publications, and three letters of recommendation be sent to the following address:

Dr. Maury Tigner, Chair
Research Associate Search Committee
Newman Laboratory
Cornell University
Ithaca, NY 14853 USA

Electronic submissions and inquiries
may be addressed to search@lepp.cornell.edu

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The University of New Mexico

Assistant Professor of Physics Tenure-Track Position in Theoretical Physics University of New Mexico

The Department of Physics & Astronomy of the University of New Mexico is committed to several new hires in theoretical physics over the next few years.

We invite applications for a tenure-track (probationary appointment leading to a tenure decision) Assistant Professor position in the following areas of theoretical physics: subatomic, particle astrophysics, cosmology, and particularly their intersection. We are most interested in candidates who have worked in more than one of these areas. Minimum Requirements: Ph.D. in Physics or related fields and a minimum of two years of postdoctoral experience. The expected starting date for this position is August 2007. For complete details please review the job posting at <http://www.unm.edu/~oeounm/facpost.html>.

The University of New Mexico is an Equal Opportunity/Affirmative Action Employer and Educator. Qualified women and minorities are strongly encouraged to apply.



University of Massachusetts, Amherst Postdoctoral Research Position

Applications are invited for a postdoctoral position to work on the parity-violating electron scattering program in Hall A at Jefferson Laboratory. Two new approved experiments (HAPPEXIII and PREX) are scheduled to run in summer 2008. The successful candidate is expected to be resident at Jefferson Laboratory and participate in all aspects of the design, commissioning and data taking phases of these projects. Details on required qualifications and on how to apply can be found at: <http://people.umass.edu/kkumar/postdoc06.html> or by contacting Krishna S. Kumar, Department of Physics, University of Massachusetts, Amherst, MA 01003. Women and members of minority group are encouraged to apply. AA/EoE.



Electrical Engineers

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.

Jefferson Lab is currently seeking exceptional engineering candidates for the following positions:

RF - Digital Signal Processing (DSP) Engineer - AR0852: responsible for design and development of accelerator beam instrumentation and controls including RF/microwave receiver technology, controls, and digital signal processing (DSP). Incumbent must have a strong background in modeling and simulation of RF receivers or control systems, preferably using Matlab-Simulink, have experience designing DSP systems using processors or FPGA's and have experience using VHDL or Verilog. An aptitude for physics and linear accelerator experience is desired. MS degree (PhD preferred) in Electrical Engineering and 5 years experience.

Digital Engineer - AR0846: involves the design and development of accelerator beam instrumentation and controls including RF/microwave receiver technology, feedback controls, digital signal processing (DSP), and optical imaging. The candidate must have VHDL or Verilog programming experience, experience with engineering CAD/software packages such as Mentor Graphics, Cadence, Matlab, and/or other engineering simulation programs is desired. BS/MS in Electrical Engineering or Computer Engineering; background in digital electronics and course work/experience in two of the following - digital signal processing, FPGAs, microprocessors or analog electronics.

Diagnostics Digital Engineer - AR0847: incumbent will assist in the design, development, documentation, implementation and maintenance of various subsystems for beam instrumentation systems. Designs may include digital systems and analog electronics. BS/MS in Electrical Engineering or Computer Engineering and thorough background in electronics with course work/experience in two of the following areas - digital signal processing, FPGAs, microprocessors or analog electronics.

For more information and to apply on-line, please visit: www.jlab.org/jobline

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Thomas Jefferson National Accelerator Facility

Mathematical, Physical
and Life Sciences Division



UNIVERSITY OF
OXFORD

Department of Physics in association with Wadham College

University Lecturer in Theoretical Particle Physics

Combined University and College salary will be on a scale up to £50,589 per annum, plus additional College benefits.

The Department of Physics proposes to appoint a University Lecturer in Theoretical Particle Physics with effect from 1st June 2007 or as soon as possible thereafter. The successful candidate will also be offered a Tutorial Fellowship by Wadham College, under arrangements described in the further particulars.

Applicants should have a strong background and active research programme in theoretical particle physics in areas that complement and enhance the existing strengths of the Particle Theory Group, with preference for the areas of collider physics and Beyond-the-Standard-Model physics related to the LHC programme. The successful candidate will be expected to participate actively in research, undergraduate and graduate teaching and supervision, and relevant administration.

Further particulars, containing details of the application procedure and of the duties, may be obtained from Miss M. Barnes, The Rudolf Peierls Centre for Theoretical Physics, 1 Keble Road, Oxford OX1 3NP, UK, e-mail: margaret@thphys.ox.ac.uk or by visiting <http://www.physics.ox.ac.uk>. The closing date for applications is 1st December 2006. You should ensure that your referees send letters by this date. Please quote reference DR06/004 on all correspondence.

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www.ox.ac.uk/jobs



UNIVERSITY OF FLORIDA

ASSISTANT PROFESSOR IN EXPERIMENTAL PARTICLE PHYSICS

DEPARTMENT OF PHYSICS – UNIVERSITY OF FLORIDA

The Department of Physics at the University of Florida invites applications for a faculty position in experimental particle physics at the tenure-track Assistant Professor level starting August 2007. Our present projects include major contributions to the CMS, CDF and CLEO experiments. In the future more of our efforts will focus on the CMS experiment where the University of Florida group has taken leading roles in the preparation of the physics program, the design and construction of the muon detectors and the trigger, software, and computing components.

Applicants should have a PhD in physics and an outstanding record of research accomplishments. The appointee is expected to establish a strong research program and play a leadership role in the CMS experiment, particularly in the data analysis effort. The appointee is also expected to teach effectively at both the undergraduate and graduate levels and to participate in the educational programs and other activities of the Department.

The High Energy Experiment group is part of the University of Florida Institute of High Energy Physics and Astrophysics (IHEPA). IHEPA has excellent facilities with modern and powerful computing resources, including a Tier-2 center for LHC data analysis. Further information about the department and IHEPA may be found on our website at <http://www.phys.ufl.edu/ihepa/>.

An application consisting of a curriculum vitae, list of publications, and a statement of research interests and plans should be sent to: **Experimental Particle Physics Faculty Search, c/o Professor Darin Acosta, Department of Physics, P.O. Box 118440, University of Florida, Gainesville, FL 32611-8440, USA.** The application material may also be sent in electronic form to search06@phys.ufl.edu.

Candidates should arrange for at least three letters of reference to be sent to the above address. To ensure full consideration, applications, including letters of reference, should be received by February 1, 2007. The University of Florida is an equal opportunity institution.

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New York University

FACULTY POSITION IN EXPERIMENTAL PARTICLE PHYSICS

Department of Physics

FACULTY OF ARTS AND SCIENCE

The Physics Department at New York University invites applications for a faculty position in experimental particle physics to begin September 1, 2007, pending administrative and budgetary approval. The hiring will be either at the assistant professor or the associate professor level. The existing group, headed by two faculty members and described at <http://physics.nyu.edu/~am3/HEPexp.html>, has recently joined the ATLAS experiment at CERN.

Applicants should send a letter describing current and planned research activities, a curriculum vitae, a list of publications, and have at least three letters of recommendation sent to **The Experimental Particle Physics Committee, Department of Physics, Faculty of Arts and Science, New York University, 4 Washington Place, New York, NY 10003, USA.** Applications received by **December 15th 2006** will get first consideration.

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Max Planck Institute for Physics

(Werner Heisenberg Institute)



MAX-PLANCK-GESELLSCHAFT

Postdoctoral Positions within the ATLAS Group

The Max-Planck-Institut für Physik is one of the world's leading research institutes focused on particle and astroparticle physics from both an experimental and a theoretical perspective. One main research activity in elementary particle physics at accelerators is the participation in the ATLAS experiment to operate at CERN's Large Hadron Collider (LHC) starting in 2007. The scientific focus of the ATLAS collaboration is the search for the Higgs boson, precision measurements of top- and b-quark physics, and the search for new physics beyond the Standard Model.

The Max-Planck-Institut für Physik has contributed to the construction of three subdetectors for ATLAS, the Monitored Drift Tubes for the muon system, the Hadronic Liquid Argon (LAR) Endcap Calorimeter, and the Semiconductor Tracker (SCT). In collaboration with the ATLAS group at the Ludwig-Maximilians-Universität of Munich, the Leibniz Rechenzentrum (LRZ) and the Rechenzentrum Garching (RZG) the institute operates a Tier-2/3 computing centre for ATLAS.

We invite applications for three postdoctoral positions in experimental elementary particle physics to strengthen our ATLAS Group, each in one of the following three fields:

1. R&D for a new pixel detector concept for the upgrade of the ATLAS Inner Detector for the high luminosity period at the LHC (SLHC). In addition, participation in the commissioning of the SCT detector is required.
2. Operation of our share of the Tier computing centre for ATLAS at RZG. Major tasks involve managing the planned substantial expansion, the installation of ATLAS software, working with the LCG/glide middleware, data management and performance monitoring.
3. Hadronic calibration of the ATLAS calorimeter system and determination of the jet energy scale, in particular within the context of the top physics analyses. In addition, participation in the R&D project of the LAR Endcap Calorimeter upgrade for the SLHC is required.

For all positions contributions to ATLAS software as well as to physics analyses pursued at our institute are encouraged.

Initially, the positions are limited to two or three years, with the possibility of an extension within the scope of the German Hochschulrahmengesetz. Salary is according to the German federal pay scale (TVöD). The Max Planck Society is committed to increasing the participation of women wherever they are underrepresented. Applications from women are particularly welcome. The Max Planck Society is committed to employing more handicapped individuals and especially encourages them to apply.

Interested scientists should send their application in writing, including a CV and list of publications, indicating for which of the positions they apply, until December 1, 2006. Applicants should also arrange for three letters of recommendation to be received by the same date at the following address:

Max-Planck-Institut für Physik

(Werner-Heisenberg-Institut)

Frau A. Schielke

Föhringer Ring 6

D-80805 München

For questions concerning the three positions offered please contact Dr. Richard Nisius (nisius@mppmu.mpg.de), Dr. Stefan Kluth (skluth@mppmu.mpg.de), and Dr. Horst Oberlack (oberlack@mppmu.mpg.de), respectively.

ONLINE-ONLY OPPORTUNITIES

(at the time of going to press)

www.cerncourier.com/jobs

Stanford Linear Accelerator Centre

Texas A&M University – Physics Department

www.physicsweb.org/jobs

CCLRC Rutherford Appleton

Heriot Watt University

IPCMS-GEMME

Max-Planck Institut für Physik Komplexer Systeme

University of Newcastle upon Tyne

University of Wales – Bangor

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