

RECRUITMENT

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POSTDOCTORAL POSITIONS IN EXPERIMENTAL PARTICLE PHYSICS

The Fermi National Accelerator Laboratory (Fermilab) has openings for postdoctoral Research Associates in experimental particle physics. The Fermilab research program includes experiments with the 2 TeV proton – antiproton collider, neutrino oscillation experiments, fixed target experiments and astroparticle physics experiments. There are several positions for recent Ph.D.s to join the collider program which has completed its upgrade and begun data taking. There are also opportunities to join the neutrino oscillation experiments MiniBooNE and MINOS, the Cryogenic Dark Matter Search, the Pierre Auger Observatory (cosmic ray) project and data analysis of completed fixed target experiments. Opportunities also exist to participate in detector R&D for the future BTeV, CKM and LHC-CMS experiments. Positions associated with the experimental program are also available in the Computing Division for candidates interested in modern computing techniques applicable to HEP data acquisition and analysis.

Successful candidates are offered their choice among interested Fermilab experiments, and typically have the opportunity to participate in detector development and commissioning in addition to experiment operation and data analysis. Appointments are normally for three years with one-year renewals possible thereafter. Every effort will be made to maintain support for a Fermilab RA until she or he has the opportunity to produce physics results.

Applications and requests for information should be directed to Dr. Michael Albrow, Head – Experimental Physics Projects Department, Particle Physics Division {Albrow@fnal.gov}, Fermi National Accelerator Laboratory, MS 122, P.O. Box 500, Batavia, IL 60510-0500. Applications should include a curriculum vita, publication list and the names of at least three references. EOE M/F/D/V



Fermilab

A U.S. Department of Energy Laboratory

Theoretical and Experimental Postdoctoral Positions — RHIC spin physics

The RIKEN BNL Research Center (RBRC) at Brookhaven National Laboratory invites applications for theoretical and experimental postdoctoral positions for research to be carried out in RHIC spin physics. RBRC is a research center focusing on the physics program of the Relativistic Heavy Ion Collider (RHIC), hard QCD/spin physics, lattice QCD and relativistic heavy ion physics. The RBRC experimental spin physics program makes use of the RHIC collider's polarized proton capability. Members of the center include postdoctoral Research Associates (two-year appointments) and RIKEN BNL Fellows (up to five-year appointments). One theoretical postdoctoral position and one experimental postdoctoral position are expected to be offered for 2002. Members of the Center work closely with existing high energy and nuclear physics groups at BNL. Scientists with appropriate backgrounds who are interested in applying should send a curriculum vitae and have three letters of reference sent to Prof. T.D. Lee, Building 510A, Brookhaven National Laboratory, P.O. Box 5000, Upton, NY, 11973-5000, before February 5, 2002. BNL is an equal opportunity employer committed to workforce diversity.

BROOKHAVEN
NATIONAL LABORATORY

A passion for discovery.

www.bnl.gov



POST-DOCTORAL RESEARCH ASSOCIATE IN EXPERIMENTAL NUCLEAR PHYSICS

The Department of Physics at Ohio University invites applications for a postdoctoral researcher in experimental nuclear physics. The position is renewable for up to two years with the starting date preferably in early 2002. The position will support new and ongoing physics initiatives at Jefferson Lab. Research activities will include significant involvement in detector design and development for the Hall D meson spectroscopy project, as well as studies of electromagnetic production of strangeness using the Hall B CLAS spectrometer.

The researcher will be stationed at Jefferson Lab.

Applicants must have a Ph.D. in experimental nuclear or high-energy physics and experience working with hardware and software for accelerator-based experiments. Qualified candidates should send their CV, a description of research interests, details of hardware and design experience, and three letters of reference to:

Prof. Daniel S. Carman, Department of Physics,
Ohio University, Athens, OH 45701,
Phone: (740)-593-2964 email: carman@ohio.edu

Ohio University is an Affirmative Action/Equal Opportunity Employer



Northeastern
UNIVERSITY

FACULTY POSITION in EXPERIMENTAL PARTICLE PHYSICS

The Department of Physics at Northeastern University invites applications for a tenure-track faculty position in Experimental Particle Physics. This position will begin in September 2002 and is contingent upon availability of funding. The Experimental Particle Physics group at Northeastern is currently a funded participant in the CMS experiment at CERN and seeks candidates who will play a major role in this project. Applicants must have a Ph.D. in Experimental Particle Physics and are expected to have advanced skills in either hardware or software. In addition, they must have an outstanding research record and show promise to excel in teaching physics at the undergraduate and graduate level. Interested candidates should submit a curriculum vitae, a list of publications, a description of research interests and skills, and the names of three colleagues who have each agreed, upon request, to write a letter of recommendation to the following:

EPP Faculty Search Committee, Northeastern University, Department of Physics,
110 Forsyth Street, Boston, MA 02115.

Information may also be sent by email to eppsearch@neu.edu

Northeastern University is an Affirmative Action/Equal Opportunity/Title IX Employer and particularly welcomes applications from minorities, women and persons with disabilities.

*The Future
is our
Mission*

Forschungszentrum Jülich



The Research Centre Jülich is the largest interdisciplinary centre of its kind in Germany:

4 200 staff members are concerned with finding solutions for urgent problems in the fields of "Matter", "Energy", "Information", "Life" and the "Environment".

As a member of the Hermann von Helmholtz Association of German Research Centres (HGF), the Research Centre Jülich is primarily committed to issues of public concern.

The department Institute for Nuclear Physics (IKP) consists of two experimental institutes as well as a theoretical institute and the Subdivision for Large-scale Nuclear Physics Equipment. Its mission is - within the framework of the "Heavy-Ion Research and Hadron Physics" programme of the HGF - to pursue basic research in the field of hadron physics. The central research instrument is the COSY cooler synchrotron, which provides phase-space cooled, polarized protons and deuterons up to a momentum of 3.5 GeV/c. The construction of a superconducting linear accelerator as an injector for COSY will open up outstanding new experimental opportunities.

For the "Experimental Nuclear Physics I" division we are seeking a scientist as the

Director (C4)

We are seeking a scientifically distinguished researcher with international experience in the field of experimental hadron physics. He or she should be prepared to give future priority in his or her research to the application and further development of COSY and its experimental facilities, and also to participate in shaping the long-term future orientation of the IKP. In this connection, intensive cooperation with universities, other institutes at the Research Centre and other research institutions is expected.

For the "Theoretical Nuclear Physics" division we are seeking a scientist as the

Director (C4)

We are seeking a scientifically distinguished researcher with international experience and an attractive long-term research programme in the field of the theory of hadrons and nuclei. He or she should have an interest in the physical issues experimentally studied at COSY and should also be in a position to incorporate adjacent fields of theoretical research. He or she should also have the ability to play an active part in shaping the long-term future of the institute. In this connection, intensive cooperation with universities, other institutes at the Research Centre and other research institutions is expected.

The respective director will be appointed jointly to a chair at one of the universities of North Rhine-Westfalia ("Jülich Model"). The salary will conform to the C4 scale of the German Civil Service. Applicants are required to have "Habilitation" or an equivalent scientific qualification as well as the ability to direct a large research institute on a collegial basis and to teach on an academic level.

Equal opportunities is a cornerstone of our staff policy for which we have received the "TOTAL E-QUALITY" accolade. Applications from disabled persons are welcome.

Applications comprising a curriculum vitae, list of publications and a short summary of scientific achievements should be sent by 15 March 2002 to

Vorstand der Forschungszentrum Jülich GmbH
D-52425 Jülich
Germany

Internet Address: <http://www.fz-juelich.de>

POSITIONS IN ACCELERATOR PHYSICS AT

**MICHIGAN STATE
UNIVERSITY**

The National Superconducting Cyclotron Laboratory (NSCL) at Michigan State University is seeking several highly qualified accelerator physicists or engineers with a strong background in areas related to beam dynamics and superconducting RF technology.

The successful candidates would join the ongoing design effort for an advanced Rare Isotope Accelerator (RIA) facility recommended by the DOE/NSF Nuclear Science Advisory Committee (NSAC) as the highest priority for new construction. Career opportunities exist in several areas, including:

Particle Beam Dynamics: Of particular interest are the areas of beam transport design and linac lattice evaluation.

Radio-Frequency Quadrupole (RFQ): Of particular interest are RFQ designs appropriate for heavy-ion acceleration systems.

RF Systems: Candidates familiar with several facets of RF Systems design are required, e.g., superconducting cavity characterization by utilization of computer codes such as MAFIA and RF system design including appropriate coupling and stabilizing feedback systems appropriate for superconducting cavities.

Depending on the successful applicants' qualifications, appointments will be made at the Research Associate level or at one of three ranks in the NSCL Continuing Appointment System

(see: <http://www.msu.edu/unit/facrecds/policy/nscl01.htm>).

Interested individuals should send a CV and arrange for three letters of reference to be sent directly to

Professor Richard York,
Associate Director for Accelerators,
National Superconducting Cyclotron Laboratory,
Michigan State University,
East Lansing, MI 48824-1321.

For more information, see our website at
<http://www.nscl.msu.edu>

MSU is an equal opportunity/affirmative action institution.



FACULTY POSITIONS IN ACCELERATOR PHYSICS AT

**MICHIGAN STATE
UNIVERSITY**

The National Superconducting Cyclotron Laboratory (NSCL) at Michigan State University (MSU) is seeking outstanding candidates to fill a tenure-track position in accelerator physics. Applicants with strong interests in contributing to the ongoing RIA design efforts and similar accelerator-based projects will be given the greatest priority. RIA is the highest priority recommendation for new construction in the new Long Range Plan for Nuclear Science prepared by the DOE/NSF Nuclear Science Advisory Committee (NSAC).

The successful candidate should provide a significant increase in the scope and depth of the accelerator physics program, play a leadership role in developing future facility upgrade options, and contribute to the accelerator physics graduate education program at MSU.

The NSCL is the premier rare isotope facility in the U.S. for the next decade having recently completed a facility upgrade that will increase the intensity of rare isotopes by several orders of magnitude. The NSCL has the tradition of close interaction between groups providing an ideal mix of cutting-edge technical infrastructure and an intellectually stimulating open academic environment.

The accelerator physics group is comprised of 3 tenured faculty and 7 professional scientific staff. Accelerator physics R&D has strong infrastructure support from experienced design and manufacturing groups. A program of R&D in superconducting rf technology has been initiated with requisite facilities in place.

Depending upon the qualifications of the successful applicant, the position can be filled at the assistant, associate, or full professor level. Applicants please send a resume, including a list of publications, and the names and addresses of at least three references directly to

Professor Richard York,
Associate Director for Accelerators,
National Superconducting Cyclotron
Laboratory,
Michigan State University,
East Lansing, MI 48824-1321.

For more information, see our website at
<http://www.nscl.msu.edu>

MSU is an equal opportunity/affirmative action institution.



The University of Lausanne (UNIL) and
the Swiss Federal Institute of Technology
Lausanne (EPFL)



Professorship in the area of Observational Cosmology

A substantial expansion in the basic sciences is planned at the Lausanne site, including a significant reinforcement of physics, chemistry and mathematics and a major new effort in biological sciences and engineering. As part of this broad program, the UNIL, in close collaboration with the EPFL, anticipates the appointment of a full professor in the area of Observational Cosmology. Depending on the age and qualifications of the selected candidate, the appointment could also be made at the tenure-track assistant professor level. In 2003, he/she will become a faculty member at the EPFL, with research activities based at the Geneva Observatory in Sauverny (<http://obswww.unige.ch>), a well-known institution with a historical tradition of excellence.

We seek outstanding individuals with an excellent academic record and research achievements. The successful applicant will initiate independent, creative research programs and participate in both undergraduate and graduate teaching.

Starting date: October 1st, 2002 or as agreed. Applications from women candidates are highly welcomed.

For further information, please contact: professor W.-D. Schneider (wolfgang.schneider@ipmc.unil.ch) or professor G. Margaritondo (giorgio.margaritondo@epfl.ch) and look at <http://www-sphys.unil.ch/> and <http://dpmwww.epfl.ch/>

Applications, including curriculum vitae with publication list, brief statement of research interests and the names and addresses (including e-mail) of at least five references, must be sent before **February 28, 2002** to the Dean of the Faculty of Sciences, Université de Lausanne, Collège Propédeutique, CH-1015 Lausanne, Switzerland.

Physics at Colliders

POSTDOCTORAL RESEARCH POSITIONS

The European Union Research Training Network *Particle Physics Phenomenology at High Energy Colliders* (HPRN-CT-2000-00149) has five open positions to work on Precision Electroweak Physics, Higgs and Top Physics, and SUSY and Alternative New Physics Scenarios, at the Universities of Granada, Karlsruhe, Nijmegen, Turin and Freiburg, starting not later than fall 2002.

Candidates should send a CV and arrange for three letters of reference to be sent to

Prof. Francisco del Aguila
Departamento de Física Teórica y del Cosmos
Universidad de Granada
E-18002 Granada, Spain

or directly to the address specified for each position at

<http://www-ftae.ugr.es/network/research.html>,
where further information is available.



The **Deutsche Elektronen-Synchrotron DESY** in Hamburg, member of the association of national research centers Hermann von Helmholtz-Gemeinschaft Deutscher Forschungszentren, is a national center of basic research in physics with app. 1,400 employees and more than 3,000 scientific guests from Germany and foreign countries per year. The accelerators in operation are dedicated to particle physics and research with synchrotron radiation.

For the group – MPY – “Accelerator Physics” we are looking for a

Scientific Staff Member (m/f) - PhD Physicist -

as soon as possible for a permanent position.

At DESY you will find the open working atmosphere of a laboratory with international collaborations, interesting tasks and good career opportunities. In our main accelerator HERA 920 GeV protons collide with a 27.5 GeV spin polarized lepton beam. For the next six years, HERA - which has recently been upgraded for larger luminosity - will be the only high energy accelerator in Europe. The efforts now concentrate on the re-commissioning and the optimization of luminosity and polarization. To support this activity, DESY is looking for an all round accelerator PhD physicist as a staff member.

The successful candidate should have a PhD in physics. We expect good knowledge in accelerator physics and accelerator technology or a comparable qualification. Knowledge of at least one of the major programming languages is desirable. We also expect the willingness to participate in shift operations.

Payment and social benefits correspond to those in public services (BAT lb).

Deadline for applications: 31.01.2002

Handicapped applicants will be given preference to other applicants with the same qualifications.

DESY supports the careers of women and encourages especially women to apply.

Please send your application documents to:

DEUTSCHES ELEKTRONEN-SYNCHROTRON DESY
job offer 112/2001 • Notkestrasse 85 • D-22603 Hamburg
Phone +49 40 8998-3187 • www.desy.de
email: personal.abteilung@desy.de

Bergische Universität Wuppertal

The High-Energy Physics group at the University of Wuppertal is involved in the D0 experiment and plays an important role in building the pixel detector for ATLAS. We intend to strengthen our activities in the area of detector development and are looking for a physicist to

Set up and lead an electronics lab

The position requires several years of experience in detector development, in particular in the field of electronic or optoelectronic read-out. We also expect the person to integrate into the existing projects and to have the ability to lead a group in the area of detector R&D.

The position is paid according to the German BATlb and, depending on the qualifications of the candidate can be tenured. Interested candidates should send their CV, list of publications and the names of three references until February 15, 2002 to

**Prof. Dr. Peter Mättig, Fachbereich Physik,
Universität Wuppertal, Gaußstr. 20, D 42097 Wuppertal**
peter.mattig@cern.ch

The University of Wuppertal intends to increase the fraction of women in research. We therefore particularly encourage women to apply.

ACCELERATOR PHYSICIST Beam Electrodynamics Group

The Lawrence Berkeley National Laboratory is seeking an Accelerator Physicist to join the Beam Electrodynamics Group of the Center for Beam Physics, Accelerator and Fusion Research Division. The group is involved in the design, testing, and commissioning of radiofrequency (RF) and microwave devices and systems for acceleration, control, and diagnostics of charged particle beams, and in the analytical, computational, and experimental study of beam impedance and collective effects. In this position you will work on R&D in the analysis of beam impedance and collective effects, including analytical and computational studies; operation of laboratory test and experimental equipment; and planning and performing of beam-based experiments for a variety of projects and applications in particle accelerators. You will also participate in the design and development of devices and systems to control charged particle beams.

To qualify, you must have knowledge of and experience with impedance of particle accelerators, including theoretical techniques and calculation methods, and test-laboratory measurements of components. Knowledge of and experience with beam-environment interactions and collective effects, including theoretical analysis and experimental measurements on operational electron storage rings; familiarity with accelerator hardware devices and systems; and experience with RF cavities design and operations and impedance reduction of higher-order modes are also necessary. Successful candidates will demonstrate experimental skills in working with microwave and RF test and measurement equipment and a working knowledge of accelerator physics.

For immediate consideration, please complete our online application at <http://cjo.lbl.gov/>. Alternatively, email one copy of your resume to afnsemployment@lbl.gov (no attachments, please), or mail to Lawrence Berkeley National Laboratory, One Cyclotron Road, MS 937-0600, Berkeley, CA 94720, or fax to (510) 486-5870. Reference job number AF/014375/JCERN in your cover letter. Berkeley Lab is an AA/EEO.



UNIVERSITY OF FLORIDA

PROJECT COORDINATOR NEEDED FOR US-IVDGL PROJECT

The International Virtual Data Grid Laboratory, (<http://www.ivdgl.org/>), an exciting five-year technology deployment initiative funded by the National Science Foundation, is looking for an outstanding individual to act as Project Coordinator for the U.S. portion of the project, to be located at the University of Florida. IVDGL will deploy a global Grid laboratory together with US and international partners, that will be utilized by advanced scientific experiments, including those in high-energy physics at the Large Hadron Collider, nuclear physics, gravitational wave searches (LIGO), virtual observatories (NVO, SDSS) and other disciplines. The IVDGL will be based on Globus and Condor Toolkits and draw on Grid technologies from GriPhyN, Particle Physics Data Grid (PPDG) and the European Union DataGrid projects.

The position is being offered at the Assistant or Associate Scientist level (non-tenure accruing), to begin April 1, 2002 and continuing for the lifetime of the project, contingent on Federal funding. The successful candidate will coordinate and manage a wide variety of IVDGL activities, including the development and deployment of the laboratory infrastructure and applications, integration of the Grid toolkits and necessary further development as needed, testbed experiments, and outreach efforts. Additionally, he or she will assess progress and resources, ensure that milestones and schedules are met and work closely with the Project Directors, experiment leaders, funding agencies and other national and international Grid projects. The salary for the position depends on experience and qualifications.

For further details visit

http://www.phys.ufl.edu/~avery/ivdgl/jobs/coordinator_cern_courier.html

Applications to Prof. Paul Avery, P.O. Box 118440, Department of Physics,
University of Florida, Gainesville, FL 32611-8440, USA

Questions by e-mail to avery@phys.ufl.edu or fooster@mcs.anl.gov
or phone 352-392-9264.

The University of Florida is an Equal Opportunity, Affirmative Action Institution.



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Faculty Positions in Communication Systems

at the Swiss Federal Institute of Technology Lausanne (EPFL)

The EPFL plans a substantial expansion in the Information and Communication Sciences. In this context, the EPFL invites applications for a "Tenure-track" assistant professor position in wireless communication systems".

The ideal candidate has demonstrated excellence in research and teaching and has a background in communication theory, physical layer communications, signal processing for communications and related areas (e.g. detection and estimation, coding, information theory, software radios and adaptive signal processing). He/she is expected to participate in EPFL's research initiatives in communication systems, and in particular in the new national research center on mobile information and communication systems (see www.terminodes.org), where issues related to ad hoc networking and self organized communication systems are studied. His/her teaching duties will typically include basic communication and signal processing courses, as well as graduate level courses on his/her field of research.

Assistant professors with "tenure-track" are part of the faculty, benefit of full independence, have a competitive salary and receive support from the EPFL in terms of start-up packages (research assistants, lab equipment, running costs and secretarial support).

More information about EPFL and its Department of Communication Systems at <http://www.epfl.ch> and <http://dscwww.epfl.ch>.

Applications, including curriculum vitae with publication list, concise



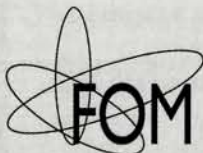
statement of research interests (three pages or less) and the names and addresses (including e-mail) of at least five references, should be sent as soon as possible, but not later than February 28, 2002 to:

Professor Jean-Yves le Boudec - EPFL
Chairman of the search committee
CH-1015 Lausanne, Switzerland

For any information, please contact Mr. Jacques Bovay:
+41.21.693.56.38 or jacques.bovay@epfl.ch

Foundation FOM

The Foundation for Fundamental Research of Matter (FOM) stimulates and coordinates fundamental physics research in the Netherlands. For that, she is enabled by grants from the Dutch government through the Dutch Organisation for Scientific Research (NWO). FOM receives funds from NWO, Euratom, EU and several companies. The 1000 employees approximately, mainly scientists (including PhD students) and technicians, are divided over five laboratories and approximately 100 departments at general and technical universities. FOM - founded in 1946 - is a foundation recognized by NWO.



The Kernfysisch Versneller Instituut is a university institute funded jointly by the University of Groningen (RuG) and the Dutch Foundation for Fundamental Research on Matter (FOM). The KVI operates the superconducting cyclotron AGOR (K=600) for research in nuclear physics. The AGOR cyclotron, with its very

advanced ancillary equipment, has a wide appeal to the international nuclear physics community. The AGOR facility has been recognized together with the partner institutes TSL Uppsala and IKP/Forschungszentrum Jülich as the large-scale facility LIFE (Light-Ion Facility Europe). The KVI is looking for a

Staff Physicist accelerator group (f/m)

The accelerator group is responsible for operating, maintaining and developing the AGOR cyclotron facility.

The group consists of three staff physicists and ten technicians for operation and maintenance. Expert technical support is provided by the technical departments of the KVI. The tasks of the staff physicist are

- Theoretical and experimental study of the beam dynamics in the cyclotron.
- Provide expert level support to the operators and users of the facility.
- Responsibility for projects to improve the performance of the facility.
- Assist in the operation and maintenance of the facility.
- Contribute to the education program of the KVI and the physics department of the University of Groningen.

Profile

- A recently completed university education in (technical) physics or a related subject.
- First job experience, equivalent to PhD level, required.
- Experience with and interest in computational physics.
- A broad interest in relevant fields, such as accelerator physics, control systems, cryogenics, RF techniques and electronics.
- Team worker.

Information

For further information on this position contact dr. S. Brandenburg, phone +31-50-363 25 73 / +31-50-363 36 00, email brandenburg@kvi.nl. Information on the facility is found on our website www.kvi.nl

Terms of employment

Initial appointment for two years followed by tenure in case of good performance. For candidates with a suitable experience in accelerator physics and technology direct tenure will be considered. Salary up to a maximum of € 49,351 gross per year, depending on education and experience. Career perspective in case of excellent performance: annual salary up to € 55,117 gross. The employee is admitted to the ABP Pension Scheme.

Application

Applicants are requested to submit a curriculum vitae addressing specifically scientific and technical qualifications, a list of publications with an indication of the most relevant for the application and the names and addresses of three references before 1 March 2002 to Kernfysisch Versneller Instituut, attn. Mrs. A.M. van der Woude (Personnel Dept.), Zernikelaan 25, 9747 AA Groningen, The Netherlands, or by email landstra@kvi.nl

the abdu salam international centre for theoretical physics

The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy, a UNESCO-IAEA organisation, located in the Adriatic Riviera in the middle of a larger research complex with 74 resident physicists and 13 resident mathematicians, is seeking to reinforce its research activities which are organised in four main groups: High Energy Physics, Condensed Matter Physics, Mathematics and Physics of Weather and Climate. For more information, see our website: <http://www.ictp.trieste.it/>

We are particularly interested in expanding in the following directions:

In High Energy Physics:

String Theory (in particular recent developments in non-perturbative string theory and gauge theory-gravity duality); Cosmology (including cosmological models; dark matter and dark energy; structure formation; cosmic microwave background radiation; galaxy surveys; models of inflation; physics of the Early Universe; black holes).

In Condensed Matter Physics:

Strongly correlated electron systems; disordered and mesoscopic systems, ab-initio electronic structure studies, computational simulation of condensed matter; theoretical nanoscience, surface physics, friction, liquids, glassy systems; statistical physics and related interdisciplinary areas, soft matter, theory of computation, bio-systems, etc.

In Mathematics:

Algebraic and differential geometry; analysis; differential equations; probability theory; mathematical modelling; mathematics of economics; mathematics of computer science.

In Physics of Weather and Climate:

Oceanography; atmospheric modelling; maintenance and development of software for the group in weather and climate research.

We are seeking well-qualified scientists active in research with a significant publications record. Candidates from developing countries and women candidates are particularly welcome to apply. Outstanding candidates working in related areas are also encouraged to apply.

The ICTP has a world-wide reputation as a research centre that has as its mission the promotion and support of science in the developing world. The scientists we are looking for should therefore share our motivations and work actively for the dissemination of scientific knowledge. They should be prepared to collaborate in running the training activities of the Centre and be ready to assist and work with the scientific visitors. Every year, the Centre receives of the order of 4,000 visitors.

The positions will be both United Nations professional positions as well as tenure track positions which can be transferred into professional positions within five years. The following 15 positions are presently available: In High Energy Physics, two P3s and two P4s; in Condensed Matter Physics, four P3s; in Mathematics, two P4s and three P3s; in Physics of Weather and Climate: two P1/P2s. More positions are expected to be created and tenure track positions are available now reserved for young scientists.

The net annual salary ranges are as follows: For P-1/P-2: from US\$39,603 to US\$53,537, For P-3: from US\$46,789 to US\$67,170, For P-4: from US\$55,589 to US\$77,819.

Most countries recognise our salaries as tax exempt. Moreover, there are special benefits connected with travel to the home country, children's education and other grants. Further details on salaries may be found at <http://www.ictp.trieste.it/~staff/psalaries.html>

A full curriculum vitae to be accompanied by a complete list of publications should be provided on UNESCO Form No. 250 which may be obtained from the **Abdus Salam International Centre for Theoretical Physics, Personnel Office, Box 586, I-34100 Trieste, Italy; Fax: +39 040 2240593; e-mail: staff@ictp.trieste.it**, or electronically from the Web (<http://www.ictp.trieste.it/>). For the junior positions, candidates should arrange for three letters of recommendation to be sent directly to the ICTP Personnel Office at the above address.

The closing date for applications is 31 March 2002.

CORNELL UNIVERSITY

RESEARCH ASSOCIATE EXPERIMENTAL ELEMENTARY PARTICLE PHYSICS

The experimental high energy physics group at Cornell University has an opening for a Research Associate to work on the CLEO-c experiment at the Cornell Electron Storage Ring. This experiment provides a unique opportunity for high precision measurements in the Upsilon family, at the J/Psi, and near the DD and DsDs production thresholds.

These measurements will play a significant role in future unitarity constraints through both direct contributions and through precision calibration and testing of QCD calculation techniques. The high statistics radiative J/Psi sample will provide a powerful laboratory for the search of exotic QCD resonances, such as glueballs and hybrids. The successful respondent will also play a lead role in the development of a Linear Collider Detector R&D program at Cornell.

Appointments are nominally for three years with the possibility for renewal beyond that, subject to mutual satisfaction and the availability of funds under our NSF contract. A Ph.D. in experimental elementary particle physics is required.

Please send an application including curriculum vitae and a publications list to

Lawrence Gibbons, Newman Laboratory,
Cornell University, Ithaca, NY 14853,

and arrange for at least two letters of recommendation to be sent.

Email correspondence may be directed to search@lms.cornell.edu.

*Cornell is an equal opportunity/affirmative action employer.
Women and minorities are encouraged to apply.*



Laboratoire de l'Accélérateur Linéaire

Physicist/RF Engineer

We have an opening for a physicist/RF engineer to join our particle accelerator group. We are currently involved in international collaborations with DESY (TESLA) and CERN (CLIC). The successful candidate will be expected to contribute to these programmes which involve the construction of accelerator components.

In addition to a knowledge of beam theory, and experience with computer simulation codes, the successful candidate should be familiar with accelerator related technologies. In particular, previous experience with radio-frequency cavities, microwave measurement techniques and beam instrumentation is desirable.

The candidate will be expected to assume the responsibility of project leadership in the construction of accelerators or accelerator components.

Candidates should have several years of experience in the field of accelerators and should have obtained an Engineering Diploma (level Grande Ecole) or a Ph.D in physics or electrical engineering. A good command of the English language is essential. Salary will be dependent on experience.

Please write with CV to: **Service du Personnel - Laboratoire de l'Accélérateur Linéaire, B.P. 34 91898 Orsay CEDEX, France.**

Informal enquiries can be addressed to **Dr .T. Garvey** Tel: 33 (0)1 64 46 89 61; e-mail garvey@lal.in2p3.fr



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Faculty positions in transmission and technologies for telecommunications at the Swiss Federal Institute of Technology Lausanne (EPFL)

The EPFL invites applications for a tenure track Assistant Professor position at its School of engineering. We seek an outstanding individual with an interdisciplinary vision and a strong record of research accomplishments.

The new professor will develop a first rate research and teaching program in one or more areas related to telecommunication technology (physical layer), for instance novel optical communications techniques, satellite communications, wireless local loop, component-system issue. Interdisciplinary vision and industrial experience are assets.

The position requires teaching talents and the capacity to guide students, Ph.D. students and young researchers. Please contact Prof. Philippe Robert for more information (+41.21.693.26.07, philippe.robert@epfl.ch).

The EPFL is a top, internationally oriented Institute of Technology which offers competitive salaries, substantial start-up packages and excellent research and teaching facilities. The EPFL invites women to apply.

Applications, including a curriculum vitae with publication list, brief statement of research interests (three pages or less)



and the names and addresses (including e-mail) of at least five references should be sent before March 15, 2002 by writing to:

**Professor Michel Declercq, Dean
EPFL**

CH-1015 Lausanne, Switzerland.

More information on EPFL: <http://www.epfl.ch>



the German National Laboratory for Heavy-Ion Research, a member institute of the Helmholtz-Society of German Research Centers, invites applications for

Postdoctoral positions in Electronics and Computing

in the Department of Data Processing and Experiment Electronics

- **Subdivision: Computer Systems and Networks - Code: 2300-02.1**
to join a team extending and further developing network-based PC systems running Windows NT and 2000. The migration to Windows XP including Terminal Server Edition and IIS will be a major task.
- **Subdivision: Digital Electronics - Code: 2300-02.2**
to join a team designing, developing, and maintaining hardware-oriented software and test systems for data acquisition hardware of nuclear experiments at GSI. The use and programming of DSPs, JTAG, and FPGA will be the main task.
- **Subdivision: Digital Electronics - Code: 2300-02.3**
to join a team designing, developing, and maintaining digital systems and circuits for the data acquisition of nuclear and high energy physics experiments. The development of discrete and integrated circuits will be the main task.
- **Subdivision: Experimental Data Processing - Code: 2300-02.4**
to join a team designing, developing, and maintaining an object oriented software system to be used for data analysis of nuclear experiments at GSI. The development of class libraries focused on applications will be the main task.

In all cases a PhD in Nuclear or Particle Physics or Electronics or Information Technology is required. Practical experience in PC technologies or digital electronics or data analysis, software development, and object-oriented programming would be preferred. This is an opportunity to develop state-of-the-art hardware and software for one of the outstanding sites of heavy-ion physics.

All appointments will be limited to 3 years. Applicants should not be older than 32 years. Women are especially encouraged to apply for the position. Handicapped applicants will be given preference to other applicants with the same qualification.

For more information please contact: M.Richter@gsi.de

Applications including the appropriate code should be submitted not later than February 15, 2002 to:

**GESELLSCHAFT FÜR SCHWERIONENFORSCHUNG MBH
PERSONALABTEILUNG
POSTFACH 11 05 52
D-64220 DARMSTADT**



In international cooperation the research center DESY plans and develops an innovative future project: TESLA, a 33 km long, superconducting linear accelerator with integrated X-ray lasers.

The research-area extends from the structure of matter to material science and life science. For this challenging project we seek a

physicist for research at the VUV - Free Electron Laser

A free electron laser (FEL) is under construction at the TESLA Test Facility at DESY which will provide unique conditions for research in the 60 to 6 nm wavelength range.

For further developments in the area of photon beam transport and optics or pump-probe experiments we seek a scientist holding a PhD in physics. Applicants should have a strong experimental background in the field of FELs, synchrotron radiation or optical lasers. Experience with coordinating large projects would be helpful. The position is permanent, salary and social benefits are according with those of the civil service (BAT IIa/Ib).

DESY supports the careers of women and therefore encourages especially women to apply. Handicapped persons will be given preference to other equally qualified applicants.

Deutsches Elektronen-Synchrotron DESY
code: 124/2001 • Notkestrasse 85 • 22603 Hamburg
Phone: +49 40 8998-3901 • www.desy.de
email: personal.abteilung@desy.de

Deadline for application: 31.01.2002



**Laboratori Nazionali
del Gran Sasso dell'INFN**

European Community – Improving Potential Programme Access to Research Infrastructures 1st Call for Proposals

The Laboratori Nazionali del Gran Sasso (LNGS) of Istituto Nazionale di Fisica Nucleare (INFN), Italy, have been recognized by the European Union as a Major Research Infrastructure, for the period January 1, 2002 April 30, 2004 (Contract N. HPRI-CT-2001-00149).

This Contract offers the opportunity for European research groups, performing or planning a research activity at LNGS to APPLY FOR E.U. FUNDED ACCESS TO THE LNGS, to cover subsistence and travel expenses.

The only eligible research teams (made of one or more researchers) are those that conduct their research activity in the E. U. Member States, other than Italy, or in the Associated States.

Proposals must be submitted in writing using the Application Forms that can be downloaded from our website (*). They must describe the research project that the group wishes to carry out at the LNGS, including the number of researchers involved, the duration of the project and the research facility of interest. Submitted proposals will be evaluated on the basis of scientific merit and interest for the European Community by a Users Selection Panel of international experts. The results will be communicated to the Group Leaders. Applications must be sent by March 5, 2002, to:

LNGS Director, TARI, INFN, Laboratori Nazionali del Gran Sasso, S.S. 17 bis Km 18,910
Fax. +39 0862 437 218

More information can be obtained by visiting our website at

(*) <http://www.lngs.infn.it/site/europe/trans.html>

or from the TARI secretariat, e-mail tari@lngs.infn.it, fax +39 0862 437 218

Computing Division Head

Fermi National Accelerator Laboratory, dedicated to fundamental research in particle physics and related fields, and home to the world's highest energy accelerator, has an exceptional professional opportunity available to lead one of its four major scientific divisions.

The dynamic individual we seek will lead more than 200 computer professionals and physicists in the operational, computing R&D and physics components of our Computing Division. The Division supports the experiment computing needs for the broad spectrum of the Laboratory's scientific program.

The demands of our experimental program on computing technologies, both for CPU capacity and data handling, are among the most intense of any activity in the world and include operating some of the world's largest workstation clusters for reconstruction of data, a 50 GFlop supercomputer for theoretical calculations, disk capacity exceeding 2 TBytes, and robotic storage of 40 TBytes. The current run of our colliding beams program, which began in early 2000, will produce nearly a PetaByte of data per year, requiring expansion of our computing capacity to nearly 300,000 MIPS for reconstruction and analysis, as well as some 40 TBytes of disk, and 400 TBytes of robotic storage for the first two years.

Reporting to the Laboratory's Director and Associate Director for Research, the qualified candidate will possess extensive knowledge of present computing technologies and trends relating to both the commercial and academic computer science sectors. Project management and organizational expertise in a highly technical environment is also essential, as is experience in large scientific facilities, with dispersed experimental collaborations. High-energy physics experience is a plus.

Located 40 miles west of downtown Chicago, we offer a competitive salary and excellent benefits package. For consideration, please forward a curriculum vitae, three references and a letter of interest to: **Dr. Michael H. Shaevitz, Associate Director for Research, MS 105, Fermi National Accelerator Laboratory, P.O. Box 500, Batavia, IL 60510-0500, USA.** To access Employment Opportunities at Fermilab and a complete description of this position, our URL is [<http://fnalpubs.fnal.gov/employ/jobs.html>]. EOE M/F/D/V



Fermilab

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March issue: 8 February

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Contact Debra Wills:

Tel. +44 (0)117 930 1196 Fax +44 (0)117 930 1178

E-mail debra.wills@iop.org

cerncourier.com

Accelerator Physics Group Leader

The Spallation Neutron Source (SNS) Project at the Oak Ridge National Laboratory (ORNL) invites applications for an Accelerator Physics Group Leader. The US Department of Energy's Office of Science has funded the design and construction of the SNS, which will provide the most powerful next-generation short-pulse spallation neutron source in the world for neutron scattering and related research in broad areas of the physical, chemical, materials, biological and medical sciences. The SNS is a partnership among six DOE national laboratories (Argonne, Brookhaven, Jefferson, Lawrence Berkeley, Los Alamos and Oak Ridge), and is scheduled for completion in 2006.

Candidate will manage and lead the Accelerator Physics Group consisting of approximately 15 scientific and applications software employees. Responsible for the physics aspects and intellectual leadership for beam commissioning. Develops and implements strategic plans for physics designs, design validations, machine performance, future upgrades and interfacing with partner Laboratories where required. Establishes personnel needs, requirements and training for Physics and Applications Software teams. Assists the Accelerator Systems Division Director in developing technical and administrative goals related to design, testing, commissioning, operating and future planning strategies.

A PhD in science or engineering, with at least 3 years of experience in successfully managing an accelerator physics group, or an equivalent combination of education and experience, are required. Must have a proven record of performance in accelerator system design, commissioning and operation. Demonstrated success in identifying and recruiting highly qualified technical and scientific staff is required. Excellent written and oral communications skills are also necessary.

Qualified candidates should send their resume, with a list of three or more references, to: M.J. Fultz, SNS Project, Dept. W-0969, 701 Scarboro Road, MS-6477, Oak Ridge, TN 37830; email: fultzmj@sns.gov. Applications will be accepted until the position is filled.

For more information, visit our website at www.sns.gov

ORNL, a multiprogram research facility managed by UT-Battelle, LLC, for the US Department of Energy, is an equal opportunity employer committed to building and maintaining a diverse workforce.



Deutsches Elektronen-Synchrotron
INFORMATIONTECHNOLOGY



DESY is one of the five large accelerator centres worldwide. The research spectrum reaches from elementary particle physics up to molecular biology and medicine and is unique in Europe.

With respect to the scientific program more than 4,000 employees and guest scientists from 35 different nations are using services offered by DESY's IT group. For scientific computing a heterogeneous UNIX environment is centrally maintained with Linux being the predominant platform (more than 1,000 Servers and Workstations) supported by IT via a network based install service.

We are searching for a

Computer Scientist (m/f)

as soon as possible for a permanent position.

As a member of the IT Systems Group you will continue development of the existing infrastructure in close cooperation with the user community, analyse requirements and define and implement future computing and storage systems.

You should have a degree in computer science or a comparable field and good knowledge in modern operating systems, especially Linux/UNIX. If you are creative, motivated, show initiative and are interested to work in an international research environment, please send your full CV to our personnel division.

The salary and the social benefits correspond to those in public services (BAT lb).

Due to German law handicapped persons with the same qualifications will be given preference to other applicants.

DESY is an equal opportunity employer and therefore encourages especially women to apply.

Deutsches Elektronen-Synchrotron DESY

code: 131/2001 • Notkestrasse 85 • 22603 Hamburg • Germany
Telefon +49 40 8998 3618 • www.desy.de
personal.abteilung@desy.de

Deadline for applications: 07.02.2002

The University of Tennessee



ASSISTANT PROFESSOR POSITION

EXPERIMENTAL HIGH ENERGY PHYSICS

The Department of Physics and Astronomy at the University of Tennessee invites applications for a tenure-track position of Assistant Professor in Experimental High Energy Physics. Exceptional candidates at the Associate Professor level will also be considered.

The successful candidate is expected to have a strong research record, outstanding promise for future research accomplishments, an interest in interacting with research programs within the High Energy Group and the Department, and commitment to education. The HEP group is involved in the KamLAND experiment in Japan, the BTeV experiment at FNAL, and is developing a reactor-based experiment for neutron-antineutron transition search. Candidates must have a Ph.D. in High Energy Physics and postdoctoral or faculty experience.

Applicants should send a CV, a letter describing research interests and have three letters of recommendation sent to

**Professor Yuri Kamyskov, Department of Physics,
University of Tennessee, Knoxville, TN 37996-1200.**

Review of applications will begin March 1, 2002 and will continue until the position is filled.

*The University of Tennessee is an Equal Opportunity/Affirmative Action
Title VI/TitleIX/Section 504/ADA Employer and Educator.*

Postdoctoral Position in Nuclear Theory

For information see
<http://nuc003.psc.sc.edu/~myhrer/theory.html>

UNIVERSITY OF
SOUTH CAROLINA

Access
PhysicsJobs



physicsweb.org



The **Deutsche Elektronen-Synchrotron DESY** in Hamburg, member of the association of national research centers Hermann von Helmholtz-Gemeinschaft Deutscher Forschungszentren, is a national center of basic research in physics with app. 1,400 employees and more than 3,000 scientific guests from Germany and foreign countries per year. The accelerators in operation are dedicated to particle physics and research with synchrotron radiation.

For the group – T – "Theory" we are looking for a

Theoretical Physicist (PhD) m/f

as soon as possible for three years with the possibility of subsequent permanent employment.

The candidate will be responsible for research in the area of theoretical particle physics with focus on e+e-physics at high energies and close collaboration with the experimental groups preparing the TESLA physics program.

Applicants should have a PhD in physics, broad knowledge of particle physics, in particular of e+e-physics at high energies; expertise in particle physics phenomenology, numeric and symbolic calculational methods, Monte Carlo simulation and event generators, as well as experience in collaborating with experimental groups.

Payment and social benefits correspond to those in public services (BAT lb).

Deadline for applications: 31.01.2002

Handicapped applicants will be given preference to other applicants with the same qualifications.

DESY supports the careers of women and encourages especially women to apply.

Please send your application documents to:

DEUTSCHES ELEKTRONEN-SYNCHROTRON DESY
job offer 113/2001 • Notkestrasse 85 • D-22603 Hamburg
Phone +49 40 8998-2416 • www.desy.de
email: personal.abteilung@desy.de



The **Deutsche Elektronen-Synchrotron DESY** in Hamburg, member of the association of national research centers Hermann von Helmholtz-Gemeinschaft Deutscher Forschungszentren, is a national center of basic research in physics with app. 1,400 employees and more than 3,000 scientific guests from Germany and foreign countries per year. The accelerators in operation are dedicated to particle physics and research with synchrotron radiation.

For the group – T – "Theory" we are looking for a

Theoretical Physicist (PhD) m/f

as soon as possible for three years with the possibility of subsequent permanent employment.

The candidate will be responsible for research in the area of theoretical particle physics with focus on QCD at high energies and close collaboration with the experimental HERA groups.

Applicants should have a PhD in physics, broad knowledge of particle physics, in particular of QCD at high energies; expertise in particle physics phenomenology, numerical methods, Monte Carlo simulation and event generators, as well as experience in collaborating with experimental groups.

Payment and social benefits correspond to those in public services (BAT lb).

Deadline for applications: 01.02.2002

Handicapped applicants will be given preference to other applicants with the same qualifications.

DESY supports the careers of women and encourages especially women to apply.

Please send your application documents to:

DEUTSCHES ELEKTRONEN-SYNCHROTRON DESY
job offer 114/2001 • Notkestrasse 85 • D-22603 Hamburg
Phone +49 40 8998-2416 • www.desy.de
email: personal.abteilung@desy.de



RHEINISCHE FRIEDRICH - WILHELMS - UNIVERSITÄT BONN

The **PHYSIKALISCHES INSTITUT** of Bonn University invites applications for the position of an

Akademischer Rat/Rätin (A 13)

to be filled May 1, 2002.

The position implies the management and organisation of the electron accelerator ELSA including research and development and the support of the running experiments in hadron physics and synchrotron radiation.

We are seeking a highly qualified candidate with a strong record in accelerator physics in particular in the production, acceleration and transport of polarised electrons. The appointee is expected to contribute to education and teaching of these subjects. Budget management, responsibility for radiation safety at ELSA as well as the coordination of the attached mechanical and electronics workshops are also part of the function.

Information about research and teaching activities of the Physikalisches Institut can be found at <http://pi.physik.uni-bonn.de>.

Please submit your applications with a CV and a list of publications not later than March 15, 2002 to **Physikalisches Institut, Geschäftsführender Direktor Prof. Dr. N. Wermes, Nussallee 12, 53115 Bonn**. The University of Bonn especially encourages women to apply. Handicapped applicants will be given preference to other applicants with the same qualification.



Kansas State University

Assistant/Associate Professor Experimental High Energy Physics

The Kansas State University Department of Physics invites applications for a tenure-track faculty position at the Assistant or Associate Professor level in Experimental High Energy Physics. The successful candidate must have demonstrated research accomplishments in this field, and will be expected to enhance a research program which is currently active in collider physics at the D0 detector at Fermilab and the CMS detector at LHC. Our department is committed to excellence in teaching at all levels – from introductory courses for non-science students through graduate courses for physics majors. Every candidate must demonstrate the ability to teach effectively and have an interest in working with undergraduate and graduate students.

Screening of applicants will commence February 1, 2002 and continue until the position is filled. Interested persons should submit a CV, publication list, a statement of research and teaching interests, and arrange for at least three letters of recommendation to be sent to

Dean Zollman, Head, Department of Physics,
Kansas State University, Manhattan, KS 66506.

(dzollman@phys.ksu.edu)

Kansas State University is an equal opportunity, affirmative action employer and actively seeks diversity among its employees.