

RECRUTEMENT

Pour tous renseignements sur des publicités dans le *Courrier CERN*, les dates de publication ou les dates limites, veuillez nous contacter:
Institute of Physics Publishing, Dirac House, Temple Back, Bristol BS1 6BE, UK. Tel: +44 (0)117 930 1028. Fax: +44 (0)117 930 1178. E-mail: sales@cerncourier.com.
Tarifs par centimètre/colonne: monochrome \$74/€68/£47, 1-couleur, \$76/€71/£49, 4-couleur \$80/€74/£51



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

The EPFL is a leading university, with strong emphasis on basic, engineering and life sciences. In order to develop our research and education programs in the field of energy, we plan to create a new transdisciplinary "Energy Center" as a high priority program with strong funding and a series of academic positions at the junior and senior level.

To set up, establish and lead the center, EPFL invites applications for the position of « Chair of the Energy Center ». The ideal candidate has an outstanding academic record and a strong vision for research, teaching and industrial developments in the field.

The appointment is planned at the Full Professor rank. The personal scientific areas of interest are very flexible but a strong expertise in renewable energies would be an additional asset.

We offer a dynamic and entrepreneurial academic environment as well as internationally competitive salaries, benefits and resources package.

Chair of the Energy Center at the Swiss Federal Institute of Technology Lausanne (EPFL)



Applications including CV, publication list, addresses for references, and a vision statement should be sent as soon as possible, but not later than **April 1, 2004** to:

Professor Marcel Jufer
Vice-President for Education
EPFL
CH-1015 Lausanne
Switzerland
(vp.formation@epfl.ch)

For additional information on the EPFL, please consult:
<http://www.epfl.ch>

The EPFL is an equal opportunity employer.



Universität Karlsruhe (TH)

Am **Institut für Theoretische Teilchenphysik** der Fakultät für Physik der Universität Karlsruhe (TH) ist eine

Professur (C3) für Theoretische Teilchenphysik

baldmöglichst zu besetzen.

Aufgabe der Professur ist die Vertretung des Fachgebiets Theoretische Physik in Forschung und Lehre. Das Forschungsgebiet soll im Bereich der Theoretischen Elementarteilchenphysik liegen mit möglichen Schwerpunkten in der Flavorphysik (Quarks und Leptonen) oder der Physik jenseits des Standardmodells. Die Mitarbeit im Exzellenzzentrum "Teilchenphysik und Astroteilchenphysik", im Sonderforschungsbereich/Transregio "Computational Particle Physics" sowie im Graduiertenkolleg "Hochenergiephysik und Teilchenastrophysik" ist erwünscht.

Habilitation oder gleichwertige Qualifikation wird vorausgesetzt.

Die Universität Karlsruhe ist bestrebt, den Anteil an Professorinnen zu erhöhen, und begrüßt deshalb die Bewerbung entsprechend qualifizierter Frauen. Schwerbehinderte Bewerber/Bewerberinnen werden bei gleicher Eignung bevorzugt berücksichtigt.

Das Land Baden-Württemberg beabsichtigt, das Professorenbesoldungsreformgesetz des Bundes zum 01.01.2005 in Landesrecht umzusetzen. Bei einer Ernennung ab diesem Zeitpunkt wird die W-Besoldung angewandt. Im Falle einer erstmaligen Berufung in ein Professorenamt wird das Dienstverhältnis zunächst grundsätzlich befristet; Ausnahmen von der Befristung sind möglich.

Bewerbungen mit den üblichen Unterlagen, einer Darstellung der bisherigen Forschungs- und Lehrtätigkeit sowie fünf ausgewählten Sonderdrucken eigener Publikationen sind bis zum

8. April 2004

an den Dekan der Fakultät für Physik, Universität Karlsruhe (TH), 76128 Karlsruhe zu richten.



Electronics Research Engineer

TRIUMF, Canada's National Laboratory for Particle and Nuclear Physics, has an immediate opening for a Research Engineer or Scientist to lead electronics efforts associated with its new Laboratory for Advanced Detector Development (LADD). The initial focus will be on front end signal processing electronics for detector systems associated with current TRIUMF-LADD physics projects involving tracking chambers and photo-sensors. In the longer term, the engineer/scientist will be expected to participate in, and possibly initiate, development of electronics associated with new detector research areas.

The successful candidate will provide leadership in the specification, design, and implementation of experimental physics equipment and will lead a team of electronics engineers and technologists. The position requires extensive knowledge of analog and digital circuitry and of the physics of materials and semiconductor devices. As group and project leader, he/she will be responsible for specification and maintenance of test equipment, and design and preparation of circuits and associated mechanical assemblies. The incumbent may be eligible to apply for NSERC peer-reviewed funding.

Minimum qualifications include the equivalent of a B.Sc. in electrical engineering or engineering physics and at least four years practical experience including a record of completing significant projects. Additional academic qualifications such as M.Sc. or Ph.D. degrees are desirable. The position is located at TRIUMF, in Vancouver, British Columbia, and the initial appointment is for a two-year renewable term leading to a continuing appointment after five years.

Applications should include a detailed CV and at least three reference letters sent separately to the following address, or by fax, prior to April 15th, 2004. **TRIUMF Human Resources, Competition No. 925, 4004 Wesbrook Mall, Vancouver, B.C. V6T 2A3 Canada. Fax: (604) 222-1074.** Electronic applications will not be accepted. In the event where two final applicants are equally qualified, preference will be given to a Canadian citizen or permanent resident. EOE



Forschungszentrum Karlsruhe in der Helmholtz-Gemeinschaft

We are one of the biggest science and engineering research institutions of the Hermann von Helmholtz Association of National Research Centers. For us, research and development are an investment in trend-setting, humane, and environmentally sustainable technologies.

For the position of

Scientist

at our **Institute for Synchrotron Radiation (ISS)**, we offer an employment contract of unlimited duration from 01 May 2004.

Your scope of tasks will comprise the optimization, further development, and operation of the 500 MHz HF facility of the 2.5 GeV accelerator of our ANKA synchrotron radiation source. Furthermore, you will take part in national and international R&D projects. A part-time working scheme may be arranged.

Applicants should have a university degree in physics or electrical engineering, including doctorate, as well as several years of professional experience in the fields of high-frequency technology and machine physics. You should be familiar with the operation of accelerators and the support of HF components and experienced in interdisciplinary R&D project management. Knowledge of the English language that is suited for publication is required.

We offer a challenging scientific task that is associated with a high degree of independence, a variety of training opportunities, and the use of latest technical equipment.

In line with our policy of equal opportunities in the scientific-technical sector, applications from qualified women are particularly encouraged.

For technical information, please contact Dr. M. Hagelstein, ISS, phone +49 7247 82-6186.

Applications should be submitted online via our homepage under jobs/training or by ordinary mail to Ms. Hase, HPS, at the address given below, making explicit reference to the vacancy No. 20/2004:

**Forschungszentrum Karlsruhe GmbH
in der Helmholtz-Gemeinschaft
Hauptabteilung Personal und Soziales (HPS)
Postfach 36 40
76021 Karlsruhe, Germany**

Internet: www.fzk.de



Research Scientist

TRIUMF, Canada's national research laboratory for particle and nuclear physics, invites applications for a "tenure-track" Research Scientist who will lead the TRIUMF-ATLAS analysis group, and establish a new large-scale computing center at TRIUMF. The data center will coordinate ATLAS data analysis in Canada and be the Canadian node on the LHC Computing Grid (LCG). The successful candidate will, in addition to leading this effort, collaborate with ATLAS-Canada in setting up the framework for the calibration and analysis of the calorimeter's data. This position is grant-eligible and the successful candidate will be expected to establish his/her own research program within the ATLAS collaboration. TRIUMF has been involved in most aspects of Canada's contribution to ATLAS and the LHC. The detector contributions are centered on the liquid Argon hadronic calorimetry. The project is now progressing to the stage where preparations are taking place to handle the large amount of data that will be produced at the LHC.

Qualifications for this position are a PhD or equivalent in Particle or Nuclear Physics and at least 2 years of post-graduate experience with an extensive data analysis and Monte Carlo simulation component. Strong analytical skills as well as good communication and organizational skills are required. A broad knowledge of computing techniques, data handling, and system operation/management will be expected. Evidence of leadership in driving projects from inception to completion is also required.

The appointment will be made initially at a level equivalent to assistant professor at Canadian Universities, but may be elevated to a higher level if appropriate. Salary will be commensurate with experience.

TRIUMF invites qualified applicants to submit a detailed CV, and three reference letters sent separately to the following address or fax: **TRIUMF, Human Resource Dept. Competition No. 927, 4004 Wesbrook Mall, Vancouver, BC, V6T 2A3. Fax (604) 222-1074.** Electronic applications will not be accepted. Closing date is April 30th, 2004. Please note that in the event where two final applicants are equally qualified, preference will be given to the Canadian citizen or permanent resident. EOE



PAUL SCHERRER INSTITUT

research for the future

Physicist

Detector Development Swiss Light Source

Your Tasks

The detector group develops high-speed and large-area solid state detector systems, which are used at the beamlines of the Swiss Light Source. As a member of the SLS detector group you will work on our innovative hardware and software solutions for the use of the detectors at the beamlines. You will actively participate in X-ray scattering experiments using these detectors, in which the structure and dynamics of condensed matter is investigated.

Your Profile

You have completed a Ph.D. in physics and are interested in the field of solid state detector development. You have knowledge about solid state detectors as well as experience in synchrotron radiation instrumentation would be appreciated. You have programming experience in C and other high-level languages under Linux. You will work as a team player in a stimulating international environment, giving you excellent opportunities for new initiatives and independent research.

Please contact Dr. Ch. Brönnimann, tel.: +41 56 310 37 64,

e-mail: christian.broennimann@psi.ch, for further informations.

We look forward to your application: PAUL SCHERRER INSTITUT, Human Resources, Mr Thomas Erb, ref. code 6118, CH-5232 Villigen PSI, Switzerland

Peoples Fellows Program

The Peoples Fellowship Program at Fermilab supports accelerator scientists and high energy physicists early in their careers by providing unique opportunities for self-directed research in accelerator physics and technology. The Fermilab accelerator complex provides beams for collider physics at the energy frontier, and high intensity beams for neutrino physics and other fixed target programs. Current areas of accelerator research include stochastic and electron cooling, muon cooling, superconducting magnet R&D, superconducting RF R&D, linear colliders, large hadron colliders, advanced acceleration methods, accelerator controls and feedback, and computational physics and modeling.

The fellowships are awarded on a competitive basis to Ph.D. physicists of exceptional talent as evidenced by their graduate or postdoctoral work. Peoples Fellowships are open to accelerator scientists within three years of receiving their Ph.D. and to high energy physics post-docs within 5 years of their Ph.D. Fellows will work at Fermilab in areas of accelerator physics or technology of their choice. Peoples Fellowships are tenure track positions with an initial term appointment of three years.

Applicants should submit a statement describing a proposed research program, a curriculum vitae, and the names of at least four references no later than April 30, 2004. Applications, either in paper or electronic form, and requests for information should be sent to:

**James Strait, Chair, Peoples Fellows Committee
Fermi National Accelerator Laboratory, MS 343
P.O. Box 500, Batavia, IL 60510-0500
e-mail: strait@fnal.gov**

<http://www.fnal.gov/pub/forphysicists/fellowships/peoples.html>



Fermilab

A U.S. Department of Energy laboratory, Fermilab is an equal opportunity employer. M/F/D/V



UNIVERSITY OF FLORIDA

Postdoctoral or Senior Research Associate High Energy Experimental Physics

The Institute of High Energy Physics and Astrophysics at the University of Florida invites applicants for a Postdoctoral Research Associate or Senior Research Associate position to work on the CMS Experiment at the Large Hadron Collider, CERN. The University of Florida is one of the leading university groups in the CMS experiment, contributing strongly to the physics program, development of the detector, trigger, software and computing.

The successful candidate will be expected to focus on the development of the CMS physics program and contribute to the CMS offline and possibly online software. Good data analysis skills in the context of high energy physics experiments are essential. Broader experience with high energy physics detectors and electronics is a plus. Ph.D. degree in physics is required.

The initial term of this position is two years with the possibility of extension, subject to the availability of funds. Longer initial appointments for highly qualified candidates are possible.

Salary will be commensurate with experience.

Resume and three letters of recommendation are to be sent to

the Search Committee c/o Dee Dee Carver,
Physics Department, University of Florida, P.O. Box 118440,
Gainesville FL 32611
(dcarver@phys.ufl.edu).

In order to ensure full consideration, applications should be received by May 7, 2004. The position will remain open until filled.

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



UNIVERSITY OF OXFORD

Mathematical and Physical Sciences Division
Department of Physics
in association with Balliol College

University Lecturer in Theoretical Physics

The Department of Physics proposes to appoint a University Lecturer in Theoretical Physics with research interests in the area of elementary particle theory, with effect from 1st October 2004 or as soon as possible thereafter. The successful candidate will be offered a Tutorial Fellowship by Balliol College, under arrangements described in the further particulars. The combined University and College salary will be according to age on a scale up to £42,900 p.a. (pay award pending).

The research interests of candidates should overlap those of the Particle Theory Group, with some preference for the general area of string theory or non-perturbative quantum field theory. The successful candidate will be expected to participate actively in undergraduate and graduate teaching, research and relevant administration.

Further particulars of the post are available from Professor D Sherrington, Theoretical Physics, 1 Keble Road, Oxford OX1 3NP, England, e-mail: d.sherrington1@physics.ox.ac.uk Applicants should submit nine copies (one in the case of applicants based overseas) of a letter of application supported by a curriculum vitae and statement of research interests, together with the names of three referees (not more than two from the same institution). Applications should be sent to Professor Sherrington at the above address to arrive no later than 2nd April 2004. Referees should be asked to send their references (by post or e-mail) directly to Professor Sherrington by 2nd April 2004.

The University is an Equal Opportunities Employer.

PhysicsJobs@physicsweb.org

Deputy Group Leader for Subatomic Physics

The Experimental Physics Division of the University of California's Los Alamos National Laboratory is seeking a Deputy Group Leader for its Subatomic Physics Group, with strong programs in neutrino, heavy ion, and neutron physics. Additionally, there are exciting programs in radiography as applied to national security and homeland defense. New efforts are being developed in photon and neutron imaging for homeland defense. The successful applicant will be expected to spend roughly half time co-leading the group and half time conducting forefront research.

For complete description and application information, please visit
<http://www.hr.lanl.gov/jps/regjobsearch.stm> search for Job# 206708.
List CERN as the referral source when applying.

Operated by the University of California for the National Nuclear Security Administration of the Department of Energy. The Laboratory is an Equal Opportunity/Affirmative Action Employer.



The European Gravitational Observatory, a French-Italian consortium dedicated to the research on gravitational waves, operates the 3 km-long VIRGO detector, located in Pisa-Italy. EGO is recruiting:

Electro-optical Engineer/Physicist Ref. OP/E0/02
Interferometer Operator Ref. OP/OP/01

EGO also offers Post-doctoral Research Fellowships

Priorities will be given to EC nationals

Job descriptions are available on: www.ego-gw.it/employment.htm

CERN COURIER RECRUITMENT BOOKING DEADLINE

May issue: 2 April

Publication date: 16 April

Contact Reena Gupta

Tel: +44 (0)117 930 1028 Fax: +44 (0)117 930 1178

E-mail: reena.gupta@iop.org

cerncourier.com



ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLÉAIRE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

Laboratoire Européen pour la Physique des Particules
European Laboratory for Particle Physics

The Physics Department invites applicants for a long term position of a

PHYSICIST

in experimental particle physics research.

Candidates are expected to have a PhD in particle physics and an excellent record of successful work with typically 5-10 years of post-doctoral experience in this field. Further requirements include: a high capacity for innovation and leadership; competence in detection techniques and in the use of on-line and off-line software; potential for making a significant medium to long-term contribution to the scientific programme of the Organization. Very good communication skills and an aptitude for team work.

The position is of a long-term nature and offers a competitive remuneration package and excellent career prospects.

The selected candidate will take a leading role in all aspects of particle physics experiments, involving the conception and design of experiments, the development and operation of detectors and the analysis of data. He/she will also coordinate or make important contributions to studies, projects or committee work and represent the Organization at conferences, workshops, or in other research laboratories and institutions.

Interested candidates are asked to submit an application form (including the names of two referees), along with a letter of motivation, curriculum vitae and a list of their ten most significant publications using the CERN e-recruitment system (<http://ert.cern.ch>) by 10 May 2004. This position is published under reference PH-DI-2004-17-FT.

Preference will be given to nationals of CERN Member States*.

CERN is an equal opportunity employer and encourages both men and women with the relevant qualifications to apply.

* AT, BE, BG, CH, CZ, DE, DK, ES, FI, FR, GR, HU, IT, NL, NO, PL, PT, SE, SK, UK



Research Scientist

TRIUMF, Canada's National Laboratory for Particle and Nuclear Physics, has an immediate opening for a Research Scientist to lead physics efforts associated with its new Laboratory for Advanced Detector Development (LADD). The initial focus will be on detector systems associated with current TRIUMF-LADD physics projects including KOPIO, liquid xenon TPC imaging, JPARC neutrino experiments, and ISAC. The scientist will be expected to participate in and initiate new detector-related and physics research areas.

A recent Ph.D. in experimental particle or nuclear physics with strong abilities in detector technologies, electronics, simulation, and data analysis is required. In particular, the candidate will have a significant record related to detector hardware and software development and will have demonstrated the ability to carry out projects to the stage of publication of physics results. The initial appointment will be for a two-year renewable term, leading to a continuing appointment (tenure track) after five years. The successful candidate will be eligible to apply for NSERC peer-reviewed funding and will be encouraged to develop his/her own proposals.

The position will be based at TRIUMF, located in Vancouver, British Columbia. Applications from qualified candidates should include a detailed CV and at least three reference letters sent separately to the following address, or fax, prior to April 15, 2004. **TRIUMF Human Resources, Competition No. 926, 4004 Wesbrook Mall, Vancouver, B.C. V6T 2A3 Canada. Fax: (604) 222-1074.** Electronic applications will not be accepted. In the event where two final applicants are equally qualified, preference will be given to a Canadian Citizen or permanent resident. EOE



PAUL SCHERRER INSTITUT

research for the future

The Paul Scherrer Institut is a multi-disciplinary institute for research in the natural and engineering sciences with emphasis in the areas of condensed matter physics, material science, elementary particle physics, astrophysics and life sciences as well as in energy and the environment.

PSI is operating since 1997 a novel proton therapy facility for cancer treatments, using a dynamic beam delivery technique applied on a very compact proton gantry. The positive experience with the present system at PSI is now bringing a further expansion of the facility, with the installation of a dedicated medical accelerator and of a second-generation proton gantry, which shall be operated with new advanced beam delivery techniques. We are looking for an

Experimental physicist or software engineer

Your Tasks

- development of the real-time data acquisition and control system frontend software for the dynamic control of the scanned proton beam to be used for patient treatments on the new gantry.
- participation to the experimental activities in the context of the realization of the new gantry

Your Profile

- University degree in physics or informatics, preferably with a Ph.D.
- Practical experience in working with particle beams, in an accelerator environment.
- Experience in software development, preferably using VxWorks, for distributed realtime systems.
- Required are a good team spirit and a good knowledge in English and German.

For further information, Dr. E. Pedroni is at your disposition. Tel. +41 (0)56 310 35 18. We are looking forward to your application: PAUL SCHERRER INSTITUT, Human Resources, Ms Esther Spörri, ref. code 2104, 5232 Villigen PSI, Switzerland. E-mail: esther.spoerri@psi.ch

More Information about PSI and the proton therapy program can be found at www.psi.ch



Dublin Institute for Advanced Studies Schrödinger Fellowships - School of Theoretical Physics

The Dublin Institute for Advanced Studies is launching a new Senior Fellowship scheme. In the School of Theoretical Physics up to two fellowship positions will be available this year, to be called Schrödinger Fellowships. These are exclusively research positions on a fixed-term contract of up to 5 years. Candidates with a proven research record in the areas of Quantum Field Theory, Conformal Field Theory, String Theory or Statistical Mechanics are encouraged to apply.

Further details about these positions are available on the website www.stp.dias.ie or from the following: Tony C. Dorlas, Denjoe O'Connor or Werner Nahm
School of Theoretical Physics, Dublin Institute for Advanced Studies,
10 Burlington Road, Dublin 4, Ireland. tel. +353-1-614 0100

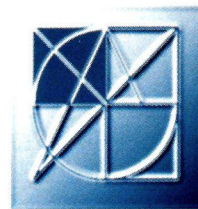
Looking for a new challenge for 2004?

Positions for PhD and Postdoctoral Researchers and Fellows in the Netherlands Institute for Metals Research (NIMR)

We are looking for highly motivated international scientists with at least a Masters degree in Metallurgy, Materials Science or Mechanical Engineering. As an employee of the NIMR, you will be expected to achieve at the highest level. You will have frequent contact with companies (SKF, Corus, Stork Fokker, Polynorm, DAF and Philips amongst others), addressing highly relevant industrial problems. You will be based in one of four Universities (Delft, Eindhoven, Groningen or Twente) in the Netherlands.

Salaries range from €2050 to €2390 (gross per month) for PhD Researchers and start from €2550 for Postdoctoral Researchers (varies according to results and experience). We offer all employees a performance-related bonus scheme, 8% on top of the annual salary, a savings plan and several courses amongst other benefits.

The official language of the NIMR is English and around half of our 90 reseachers are from outside the Netherlands.



**Netherlands Institute
for Metals Research**

**Check out our website
www.nimr.nl
for more details and an
on-line application form.**

INDEX TO DISPLAY ADVERTISERS

Amptek	18	Janis Research Company	27
Creative Electronics Systems	4	Kimball Physics	47
Electron Tubes	17	Metrolab Instruments	17
Eljen Technology	15	Pearson Electronics	30
Glassman Europe	48	QEI Corporation	27
Goodfellow Cambridge	32	Saint-Gobain Crystals & Detectors	8
Ideas	8	VAT Vacuum Products	23, 36
IEEE NSS-MIC Conference	2		
Institute of Physics Publishing Journals	10		
Instrumentation Technologies	30		

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