

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: +44 117 930 1026, Fax: +44 117 930 1178

Tarifs par centimètre/colonne: Monochrome £30, 2-couleur £36, 4-couleur £38.



Institute of High Energy Physics, Beijing Professor Positions

The Institute of High Energy Physics (IHEP), Chinese Academy of Sciences, is the research center of high energy physics in China. The major upgrade of Beijing Electron-Positron Collider (BEPC II) has been approved with the luminosity increased by a factor of 10 and rebuilding of Beijing Spectrometer (BES III). IHEP invites applicants from outstanding candidates for full professor positions in the fields of

1. Experimental particle physics (BES experiment, non-accelerator physics experiments, electronics system, computing and network system for high energy physics experiment);
2. Theoretical physics (particle physics, nuclear physics and field theory);
3. Accelerator technology (accelerator physics and technologies for BEPC II and high intensity proton accelerator)
4. Radiation technology (synchrotron radiation technology and applications, nuclear analysis and applications, free electron laser).

The appointments will initially be three years with a possibility of an extension up to tenure. For details, please refer to www.ihep.ac.cn. Applicants should contact Mr. Hou Rucheng before December 15, 2000. His mail address is as follows:

Mr. Hou Rucheng
Institute of High Energy Physics
Beijing 100039 P. R. China
Tel: 0086-10-68219643 Fax: 0086-10-68213374
E-mail: hourc@mail.ihep.ac.cn



University of Zurich, Switzerland

The Faculty of Science invites applications for a
**Full Professorship in
Theoretical Elementary Particle Physics**

The new professor is expected to pursue vigorous research and to teach theoretical physics at all levels. She or he will find a very stimulating environment including major experimental activities at the University, the ETH and PSI with strong involvements in HERA, LHC and Neutrino physics.

Candidates with a recognized scientific record in theoretical elementary particle physics are asked to send their curriculum vitae, list of publications and a summary of their research interests to the Dean of the Faculty of Science (Mathematisch-naturwissenschaftliche Fakultät), Prof. K. Brassel, University of Zurich, Winterthurerstrasse 190, CH-8057 Zurich, by November 30, 2000.

For more information, contact Prof. D. Wyler
(wyler@physik.unizh.ch).

Please visit our website at <http://www-theorie.physik.unizh.ch>.

The University encourages female candidates to apply with a view towards increasing the proportion of female professors.

APPLICATIONS PHYSICIST

The Beams Division of Fermi National Accelerator Laboratory (Fermilab) has an excellent opportunity for an Applications Physicist. The successful candidate will be expected to focus on ion source research and development. Duties will include hands-on experimental activities, calculations and simulations for negative-hydrogen ion source and low-energy beam transport improvements for the Fermilab Linac program.

This position carries an initial three-year appointment with a possible extension and consideration for a regular position on the Fermilab scientific staff. A person with a Ph.D. in physics is preferred. Candidates should have demonstrated competence in a laboratory environment working with electrical, mechanical, vacuum, and high voltage systems. Experience with sources, linear accelerators or accelerator RF systems is a definite plus. Appointment at a more advanced level may be possible for a candidate with appropriate qualifications.

Located 40 miles west of downtown Chicago, on a campus-like setting. Fermilab provides competitive salaries and exceptional benefits, including medical/dental/life insurance, tuition reimbursement, fitness center, on-site daycare, and access to our 6,800 acre nature preserve. Applicants are requested to forward their curriculum vitae and a list of at least three references to Dr. John Marriner, Fermi National Accelerator Laboratory, P.O. Box 500, M.S. 306, Batavia, Illinois 60510-0500 U.S.A.



Fermilab

A U.S. Department of Energy National Laboratory. Fermilab is an Equal Opportunity/Affirmative Action Employer M/F/D/V

Faculty Position in Theoretical Particle Physics

Cornell University

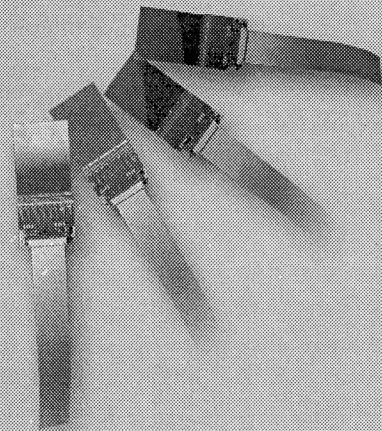
The Department of Physics at Cornell University invites applications for a tenure track Assistant Professor appointment in theoretical particle physics, to begin in Fall 2001 or later.

Outstanding applicants at a more senior level may also be considered. We are seeking highly qualified candidates committed to a career in research and teaching. We especially encourage applications from candidates with an active interest in the interface of string theory, gravity, brane physics, and field theory. However, outstanding candidates in any area of theoretical particle physics will also be seriously considered.

Applicants should send their curriculum vitae, publications list, a brief description of their research interests and arrange for three letters of reference to be sent to Professor Henry Tye, Search Committee Chair, Newman Laboratory of Nuclear Studies, Cornell University, Ithaca, NY 14853.

To receive the fullest consideration, applications should be received by
January 1, 2001.

Cornell University is an equal opportunity, affirmative action employer.



Ideas ASA is a Norwegian technology company.

The company develops and manufactures advanced electronics and IT systems for radiation detection and imaging products. Ideas technology and products are used within the fields of medical imaging, industrial detection systems and microbiological and physics research. The company's technology is at the leading edge world-wide. Its customers include world-leading suppliers of medical imaging equipment and leading research laboratories and institutes.

The company, located in pleasant premises at Høvik outside Oslo in Norway, is experiencing a strong growth.

Ideas has a highly-skilled development group and has developed its own range of analog/digital VLSI circuits (ASICs) in addition to data-acquisition products.

SENIOR ASIC DESIGNER/ASIC DESIGNERS

You will specify, design and implement analog and mixed-mode ASICs for applications within radiation detection and imaging, both for the medical field and physics research. These positions involve responsibility for ASIC implementations, documentation and worldwide customer contact.

We are looking for:

- Senior ASIC Designer with MSc (or equivalent) in Electrical Engineering and experience in analog circuit design. Knowledge of charge sensitive pulse-mode amplifiers is an advantage.
- ASIC Designers with Electrical Engineering degrees. Experience in analog circuit design is an advantage.

SENIOR DEVELOPMENT ENGINEER / DEVELOPMENT ENGINEERS

You will design, implement and test data-acquisition systems, incorporating Ideas' ASICs. The applications will be in radiation detection and imaging, both for the medical field and physics research. These positions involve responsibility for projects, hardware and software implementations, documentation and worldwide customer contact.

We are looking for:

- Senior Development Engineer with MSc. degree (or equivalent) in Electrical Engineering and experience in hardware design and hardware-near programming. A working knowledge of FPGAs and DSPs is required for this position.
- Development Engineers with Electrical Engineering degrees. Experience in analog and digital electronics, data-acquisition systems and tools such as LabView, CadStar and AutoCad is an advantage.

You should be result-oriented, self-motivated and a fast learner with team-working skills. An interest in, and an understanding of, working with customers from different cultures is important.

Ideas ASA offers a challenging and highly skilled multi-cultural working environment. You will work with leading-edge technology and highly qualified customers.

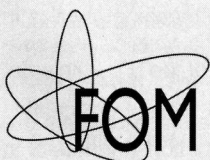
If you have any questions about these positions, please contact Koki Yoshioka, tel. +47 67 55 18 22, e-mail: koki@ideas.no.

Please send your application, including CV to Ideas ASA, Koki Yoshioka, Box 315, N-1323 Høvik, Norway, as soon as possible and no later than November 15.

ideas

Stichting voor Fundamenteel
Onderzoek der Materie

De Stichting FOM stimuleert en coördineert natuurkundig onderzoek. Ze wordt daartoe in staat gesteld door de rijksoverheid, die aan FOM subsidies verstrekt via de Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO). Daarnaast verwerft FOM gelden van de Europese Unie en het bedrijfsleven. De bijna duizend medewerkers, voornamelijk onderzoekers (incl. promovendi) en technici, zijn werkzaam in vijf laboratoria en in ruim honderd werkgroepen bij algemene en technische universiteiten.



NIKHEF is the national institute for subatomic physics in the Netherlands, in which the funding agency FOM, the Universiteit van Amsterdam, the Vrije Universiteit Amsterdam, the Katholieke Universiteit Nijmegen and the Universiteit Utrecht participate. The institute co-ordinates and supports major activities in experimental subatomic physics in the Netherlands.

Experiments are performed with accelerators at CERN (Geneva), DESY (Hamburg) and FNAL (Chicago). NIKHEF also participates in the ANTARES project. The design and

construction of detectors and the analysis of data take place at the institute in Amsterdam as well as at the participating universities. There are close interactions with the NIKHEF theory department.

The academic staff consists of about 120 physicists of whom more than half are Ph.D. students and postdoctoral fellows. Technical support is provided by well equipped mechanical, electronic and information technology departments with a total staff of about 100.

NIKHEF is searching for a

Senior experimental physicist

with an international reputation in research of heavy-flavor physics

Requirements

The candidate will be considered for a permanent position. He/she should have the ability to lead large collabor-

ative efforts and pursue a vigorous programme. The NIKHEF B-physics research group participates in both the LHCb and HERA-B experiments.

and for outstanding

Experimental physicists

with a strong record of accomplishments in experimental research, preferably in high energy physics.

Requirements

Candidates will be considered for a permanent position when they have at least several years of post-doctoral ex-

perience. The successful applicant is expected to join one of the present experimental programmes.

General requirements

Candidates should have a broad and deep knowledge of physics. Further qualifications include: creativity, competence in detection techniques and knowledge of modern information technology. The successful candidate has excellent communication skills, ability for teamwork and leadership capability.

Information

Information about the scientific and educational activities at NIKHEF can be found at: <http://www.nikhef.nl/>. Further information can be obtained from the director, Prof. dr. G. van Middelkoop (telephone: +31 205925001/ E-mail: gervanm@nikhef.nl) or the chairman of the search committee, Prof. dr. G. van der Steenhoven (telephone: +31 205922145/ e-mail: gerard@nikhef.nl).

Applications

Letters of application, including curriculum vitae, list of publications and the names of at least three references are to be sent within three weeks after publication of the advertisement to Mr. T. van Egdom, P.O. Box 41882, 1009 DB Amsterdam, the Netherlands (or by e-mail: teusve@nikhef.nl).

All qualified individuals are encouraged to apply.



CERN Courier's recruitment advertisements are on the Web within 24 hours of booking and are then sent to e-mail subscribers. **Call +44 (0)117 930 1090 for more details**

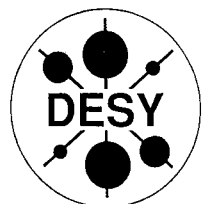
RESEARCH ASSOCIATE POSITIONS

Experimental High Energy Physics

Carnegie Mellon University

The department of Physics at Carnegie Mellon University invites applications for a postdoctoral Research Associate position in experimental high energy physics. We are looking for an outstanding individual interested in working on the CDF experiment at the Fermilab Tevatron Collider. Our group is involved in the CDF hadron calorimeter project and responsible for the overall coordination of the CDF detector simulation. We are also members of the CDF upgrade proposal to prepare the silicon detector for high-luminosity operation in 2003. The successful candidate is expected to join our current activities on CDF and play a leading role in the analysis of Run II data at CDF. Applicants should have a Ph.D. or equivalent degree in experimental particle physics, submit a curriculum vita including research interests and arrange to have three letters of recommendation sent directly to Professor Manfred Paulini and Professor James Russ, Department of Physics, Carnegie Mellon University, Pittsburgh, PA 15213, USA. Applications by electronic mail cannot be accepted. To ensure full consideration, applications must be received before December 10, 2000. Inquiries about the position can be made by sending email to paulini@cmu.edu.

Carnegie Mellon is an equal opportunity/affirmative action employer.



DEUTSCHES ELEKTRONEN SYNCHROTRON DESY

DESY is one of the leading laboratories in particle physics and synchrotron radiation research. For its location in Zeuthen near Berlin DESY is offering a

Postdoctoral Research Position

to young scientists to participate in data taking and data analysis of the AMANDA neutrino telescope at the geographic South Pole. The accepted candidate is also expected to contribute to the preparation of a next generation cube kilometer detector. The candidate should participate in operations at the South Pole, which are performed between November and January.

Applicants should have a PhD in physics. They should have worked in high energy physics or astroparticle experiments and should be able to cooperate within an engaged research team.

The position is limited to a duration of 2 years, with a possible extension for a third year. The salary will be according to the German civil services BAT-O IIa.

DESY encourages especially women to apply.

Interested young scientists should send their letter of application and three names of referees and their addresses by November, 20th, 2000 to:

**DESY Zeuthen, Personalabteilung
Platanenallee 6, 15738 Zeuthen, Germany**



Justus-Liebig-Universität Giessen
European Graduate School Copenhagen-Giessen

The European Graduate School "Complex Systems of Hadrons and Nuclei", a joint organization of the Niels-Bohr-Institute and NORDITA, Copenhagen, and the Institute for Theoretical Physics and the II. Physics Institute of the University of Giessen, is seeking candidates for

Graduate Fellowships in Experimental and Theoretical Hadron Physics

for its Giessen branch, starting January 1, 2001. Research of this Graduate School centers on Hadron Physics, both with elementary probes and with heavy ions.

Applicants should hold a Master's or Diploma degree from a recognized university, preferably in Nuclear or Hadron Physics. Accepted candidates will receive a stipend to pursue graduate work in collaboration and exchange with the Copenhagen groups, leading to a doctoral degree in Physics. All lectures will be given in English. The stipends range between about DM 2070 and DM 2870 per month, depending on qualification, and are taxfree. There are no tuition fees.

In addition we are seeking candidates for two

Postdoctoral Fellowships in Theoretical and/or Experimental Hadron Physics

for the Giessen branch of this Graduate School. These fellowships, that are taxfree, amount to DM 2870 to 3070 per month, depending on age; there are supplements for spouses and children.

Applications, including a curriculum vitae, copies of academic records, information on previous research experience and letters of reference, should be mailed to Prof. U. Mosel, Universitaet Giessen, Institut fuer Theoretische Physik, Heinrich-Buff-Ring 16, D-35392 Giessen, Germany.

e-mail: euro-grad@physik.uni-giessen.de

<http://www.physik.uni-giessen.de/EuroGrad>.



The Swiss Federal Institute of Technology Zurich (ETHZ) invites applications for a

Professor in Physics (Experimental Nuclear Physics)

The post is based in the Institute of Particle Physics (IPP). The goal of the Institute is to maintain leading research in nuclear physics with links to particle physics and/or astrophysics. The new professor is expected to carry out first-rate experimental research in nuclear and particle astrophysics, nuclear neutrino physics or in the study of fundamental interactions at low energies. He/she is encouraged to take advantage of the existing facilities at the Paul Scherrer Institute (PSI), Villigen or of the Accelerator Mass Spectrometer (AMS) located at ETHZ.

The new professor is expected to participate in teaching physics in all departments of ETHZ, including propaedeutic physics and specialized nuclear physics courses up to the level of the ETH diploma.

Applicants with internationally recognized research credentials are asked to send their curriculum vitae, list of publications, names of at least 3 references, and a short overview of their research interests to the President of ETH Zurich, Prof. Dr. O. Kübler, ETH Zentrum, CH-8092 Zurich, no later than January 31, 2001. The ETHZ specifically encourages female candidates to apply with a view towards increasing the proportion of female professors.

General information on ETH Zurich and its Department of Physics is available on "<http://www.phys.ethz.ch>". Questions referring to this position should be mailed to Prof. Dr. R. Eichler, Institute of Particle Physics, ETH Hönggerberg, CH-8093 Zurich (E-mail: eichler@particle.phys.ethz.ch).

Forschungszentrum Karlsruhe Technik und Umwelt

Wir sind eine der größten natur- und ingenieurwissenschaftlich tätigen Forschungseinrichtungen der Hermann- von Helmholtz-Gemeinschaft Deutscher Forschungszentren.

Forschung und Entwicklung sind für uns Investitionen in zukunftsweisende, menschengerechte und umweltschonende Technologien.

Im Rahmen unseres Programmes zur Förderung des wissenschaftlichen Nachwuchses suchen wir für unser **Institut für Kernphysik (IK)** auf der Basis eines dreijährigen Arbeitsvertrages eine/n

Wissenschaftliche/n Mitarbeiter/in - Nachwuchswissenschaftler/in -

Ihre Aufgabe umfasst die Mitarbeit am Pierre Auger Projekt zur Erforschung der höchstenergetischen kosmischen Strahlung. Sie planen und erstellen Teile komplexer Software-Systeme und optimieren Test-verfahren zur kameraübergreifenden Bildbeurteilung bei Spiegelteleskopen. Darüber hinaus programmieren Sie ein graphisches Benutzersystem und führen Installation, Testbetrieb und Messungen an ausge-dehnten Luftschauern durch.

Wir erwarten ein Hochschulstudium der Physik mit abgeschlossener Promotion oder ersatzweise über ein Informatik-Hochschulstudium, jeweils mit guten Grundkenntnissen in Teilchenphysik und Elektro-nik. Programmiererfahrung, gute Kenntnisse von C und C++ und Erfahrungen mit graphischen Benut-zeroberflächen sind erforderlich. Gute Englischkenntnisse, Lernbereitschaft und Kenntnisse der UML-Methode sind von Vorteil.

Wir bieten neben einer anspruchsvollen wissenschaftlichen und vielseitigen Aufgabe, mit der ein hohes Maß an Selbständigkeit verbunden ist, auch die Nutzung vielfältiger Weiterbildungsmöglichkeiten sowie eine moderne technische Ausstattung.

Bewerber, die älter als 33 Jahre sind, können aufgrund der Vorgaben des Förderprogramms leider nicht be-rücksichtigt werden.

Wir streben eine Erhöhung des Anteils der Frauen im wissenschaftlich-technischen Bereich an und wür-den uns deshalb über entsprechende Bewerbungen freuen.

Fachliche Auskünfte erteilt Ihnen gerne Herr Prof. Dr. Blümer, IK, Telefon: 07247/82-3545, E-Mail: bluemer@ik1.fzk.de

Schreiben Sie bitte an Herrn Speck unter Angabe der Kennziffer 318/2000.

Forschungszentrum Karlsruhe GmbH
– Technik und Umwelt –
Hauptabteilung Personal und Soziales
Postfach 3640, 76021 Karlsruhe

Weitere Informationen über das Forschungszentrum Karlsruhe erhalten Sie über Internet <http://www.fzk.de>

Postdoctoral Position in Experimental Particle Physics University of California at Davis

The CDF group at the University of California at Davis has an immediate opening for a postdoctoral scientist to be resident at Fermilab in the CDF collaboration. The Tevatron run will commence early in 2001 and will be an unparalleled opportunity for experimental high energy physics with the world's highest energy particle collisions. Our group of 3 faculty and 4 postdocs is working on the CDF silicon trackers. The successful candidate will be expected to take part in the commissioning and operation of the detector and to take a strong role in Run II physics analysis.

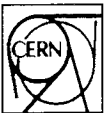
Our interests include searches for Supersymmetry and Higgs, the discovery of which would constitute a fundamental advancement for our field. Using our unique facilities for testing and hybridization, we are developing silicon pixel detectors and have recently completed a successful beam test of our pixel readout prototype. Pixels are a possible candidate for later upgrades of the CDF tracker. We are also involved in the US CMS Forward pixel program at the LHC. Candidates should have a Ph.D. in experimental particle physics and should send a CV and arrange to have three letters of recommendation sent to

Prof. Maxwell Chertok,
MS 318, Fermilab,
Batavia, IL 60510,
USA.

Applications will be accepted until the position is filled.
Email inquiries should be sent to chertok@fnal.gov.

The University of California is an equal opportunity/affirmative action employer.

CERN - European Organization for Nuclear Research



European Laboratory for Particle Physics - Geneva, Switzerland

CERN is the world's most advanced fundamental research institute in particle physics. An International Organization located in Geneva, CERN brings together some 2700 staff from 20 European Member States (AT, BE, BG, CH, CZ, DE, DK, ES, FI, FR, GB, GR, HU, IT, NL, NO, PL, PT, SE, SK) and a user community of over 5000 scientists.

We are currently recruiting:

TECHNICIANS AND ENGINEERS

- | | |
|--------------------------------------|---------------------------------|
| • Electromechanics | • Computing and Controls |
| • Mechanics | • Materials Science |
| • Electronics and Power Electronics | • Cryogenics |
| • Electricity (high and low voltage) | • Safety & Radiation Protection |
| • Control Room Operation | • Ultrahigh Vacuum |
| | • Work Inspection |

Requirements:

- recent technical or engineering qualifications;
- up to 5 years of professional experience;
- good knowledge of English OR French;
- Member State nationality (see list of CERN Member States above).

CERN is an equal opportunities employer offering attractive employment conditions and excellent training opportunities. Applications from women are encouraged. Please send your detailed curriculum vitae in English or French to: CERN, Recruitment Service, 1211 Geneva 23 Switzerland, or fax it to (+41 22) 767 27 50, quoting reference TEC/ENG-2000. Applications will be considered in strictest confidence.

For more information and an application form consult our Web site.

www.cern.ch/jobs E-mail: Recruitment.Service@cern.ch

University of Toronto

Department of Physics Tenure Track Faculty Position in Theoretical Particle Physics



The Department of Physics plans to make a tenure track appointment to the rank of Assistant Professor with a starting date of 1 July 2001. This position complements two recent appointments in string theory in the University of Toronto Physics and Mathematics Departments, anticipated new appointments in condensed matter theory, and recent appointments in cosmological and high energy astrophysics at the adjacent Canadian Institute for Theoretical Astrophysics.

For this position, we seek candidates with a Ph.D. in Physics and strong proven or potential excellence in both research and teaching, whose interests are in theoretical particle physics. We invite prospective candidates to visit our home page at www.physics.utoronto.ca. The salary will be commensurate with qualifications and experience.

Applications, including a curriculum vitae and three letters of reference, should be sent to:

Professor Henry van Driel, Chair
Department of Physics
University of Toronto
Toronto, Ontario, Canada M5S 1A7

The deadline for the receipt of applications and letters of recommendation is 2 January 2001.

Although first consideration will be given to citizens and permanent residents of Canada, we strongly encourage all qualified candidates to apply. The University of Toronto is committed to employment equity and encourages applications from all qualified individuals including women, members of visible minorities, aboriginal persons, and persons with disabilities.

The Physics Division of the Illinois Institute of Technology (IIT) seeks applicants for a tenure-track position at the Assistant or Associate Professor level in Accelerator Physics. This position will be available in January, 2001. (In addition, several postdoctoral, staff, and graduate student positions are immediately available.) The successful candidate for the tenure-track position will become a member of IIT's Center for Accelerator and Particle Physics (CAPP) and will be encouraged to interact with the CAPP faculty and will be encouraged to interact with staff at Fermilab, located approximately 60 km west of IIT. Competitive salaries and startup packages are available. Applicants should submit a curriculum vitae, a statement of research interests, and at least three letters of recommendation to:

Prof. T. I. Morrison
Chair, Physics Search Committee
Physics Division
IIT
3101 South Dearborn
Chicago, IL 60616 USA
IIT is an Equal Opportunity Employer

Colorado

University of Colorado at Boulder

Tenure Track Faculty Positions

The Department of Physics of the University of Colorado at Boulder invites applications for two tenure track faculty positions to start September 2001. The successful applicants will be expected to direct active research programs and to teach effectively and creatively at both the undergraduate and graduate levels. The positions are approved to be filled at the Assistant Professor level. Applicants should submit a current curriculum vitae, a summary of current and proposed research, and arrange to have at least three letters of reference sent directly to the chair of the appropriate search committee. Additional information can be obtained at physics.colorado.edu/jobs.html.

Experimental Nuclear Physics

Candidates with research interests in all areas of nuclear and hadronic physics are welcome. The focus of the present research program at CU-Boulder is on high-energy scattering of leptons and light hadrons from nucleons and nuclei in experiments at DESY (Hermes), Fermilab and Jefferson Lab. Attn: Chair, Nuclear Physics Search Committee, Department of Physics-CB 390, University of Colorado at Boulder, CO, 80309-0390.

Experimental Particle Physics

Candidates with research interests in all areas of this field are welcome. Possible areas of research include, but are not limited to fixed target physics, collider physics at all energies, and particle astrophysics. The current faculty in the Experimental Particle Physics group are studying CP violation physics (KTeV and BABAR), and the physics of heavy quarks (Focus, BTeV). The group is also actively involved in NLC studies. Attn: Chair, Particle Physics Search Committee, Department of Physics-CB 390, University of Colorado at Boulder, CO 80309-0390.

Completed applications and the letters of recommendation for either position should arrive by 5 January 2001, but applications will continue to be reviewed until the position is filled. *The University of Colorado at Boulder is committed to diversity and equality in education and employment.*



Texas Tech University

RESEARCH ASSOCIATE POSITION EXPERIMENTAL PARTICLE PHYSICS

The Department of Physics at Texas Tech University (TTU) has an opening for a Research Associate position in experimental particle physics. We are looking for an outstanding physicist who will concentrate the majority of his/her efforts on the CMS experiment at CERN. The TTU group is responsible for several significant components of the CMS forward calorimeters, e.g. absorber design, optics engineering, photodetector readout and calibration. In addition, the group actively participates in the CDF experiment and contributes in several areas: calorimeter front-end electronics, online calibration and monitoring, design and commissioning of the calibration database and the silicon vertex detector upgrade. The physics emphasis of our group consists of Higgs searches, Supersymmetry, B-physics and Electroweak physics.

The person filling this position will be contributing to the ongoing particle physics research at TTU with frequent trips to Fermilab and CERN. Applicants for the position should have a Ph.D. or equivalent degree in experimental particle physics. **Please send an application including curriculum vitae and publication list, and arrange for three letters of recommendation to be sent to Nural.Akchurin@ttu.edu or: Prof. Nural Akchurin Texas Tech University Department of Physics Box 41051 Lubbock, TX 79409-1051 Applications will be accepted until November 30th, 2000 or the position is filled.**

Texas Tech University is an equal opportunity/affirmative action employer.



DESY is a physics research laboratory with 1400 employees and more than 3000 guest scientists from Germany and abroad. The scientific programme includes research in particle physics and synchrotron radiation.

DESY invites applications for the position of a

Physicist or computer scientist (m/f)

For the data analysis of the DESY experiments distributed high-performance computer systems and interactive user interfaces have to be designed and developed. Especially the requirements of the experiments and the DESY-groups have to be analysed and suitable concepts for the implementation of CPU- and memory architectures have to be explored and developed. Essential part of the task is further the planning, development and realisation of concepts for the protection of computer systems and data against unauthorized access.

Applicants should have a degree in natural science or computer science or equal knowledge and skills; sound knowledge of high energy physics, modern operating systems (especially UNIX), in the fields of distributed computer architectures, of data networks based on TCP/IP and network filesystems (NFS, AFS) and in the field of object oriented technologies.

The applicants are expected to have many years of experience in the design, development and implementation of computing and memory systems for data analysis of high energy physics experiments and many years of experience with distributed centralised network architectures including network filesystems (NFS, AFS) and Storage Area Networks (SAN).

The appointment is to a permanent position with a salary according to federal tariffs (BAT 1b).

Letters of application including curriculum vitae, list of publications and the names of three referees should be sent before **November, 30th 2000**.

DESY, Personalabteilung, Notkestraße 85, D-22603 Hamburg
Code-number: 89/2000 **www.desy.de**

Handicapped applicants will be given preference to other applicants with the same qualifications. DESY supports the career of women and encourages especially women to apply.

University of Bielefeld

Postdoctoral Position in Experimental Particle/Hadron Physics

The experimental particle physics group at the University of Bielefeld has an immediate opening for a postdoctoral research fellow to work on the COMPASS experiment at CERN.

The COMPASS collaboration is presently setting-up its experiment for scattering high energy muons off polarized protons starting in the year 2001. The main goal is to measure parton spin distribution functions, in particular the contribution of gluons to the nucleon spin.

The Bielefeld group has responsibilities for the solid state polarized target, which is a central and important part of the COMPASS apparatus. It involves low temperatures (<100mK) from a dilution refrigerator, high magnetic fields (~2.5T) and microwaves to spin-polarized protons. More information to this can be found at:

<http://www.compass.cern.ch/compass/detector/target/welcome.html>.

The successful candidate should provide skills and be familiar with techniques in the fields of cryo-physics, vacuum-physics, and/or apparatus control. He should strengthen the team working on the target and participate in data-taking. The candidate is expected to be resident at CERN (Geneva). The salary will be based on the German BAT 1a pay scale. The contract would be for a period of two and a half years. Please send applications or inquiries to:

Professor Dr. G. Baum,
Universität Bielefeld,
Fakultät für Physik,
Universitätsstr. 25, D-33615 Bielefeld,
Tel. +49-521-106-5383,
e-mail: baum@physik.uni-bielefeld.de

TWO FIXED TERM RESEARCH ASSOCIATE POSITIONS IN PARTICLE PHYSICS

Rutherford Appleton Laboratory, Oxfordshire

The Particle Physics Department at the Rutherford Appleton Laboratory invites applications for two Research Associate positions in particle physics. The appointments will be initially for three years, with a possible extension by up to two years.

One of the vacancies is to work on the BaBar experiment which has already recorded the world's largest sample of B meson data and will continue to run with increased luminosity in coming years. The RAL BaBar group is active in CP violation and mixing studies in both the charm and bottom sectors. You will be expected to work principally on data analysis while also contributing to the development of RAL based data analysis facilities for the whole of the UK collaboration. The work will involve close contact with the UK University groups, and will require periodic travel to SLAC and elsewhere. You may be based at SLAC for one year during the initial three year appointment.

The other vacancy is to work on physics studies and detector R&D for the future e^+e^- linear collider. The RAL group is part of the international LCFI (Linear Collider Flavour ID) collaboration which is studying the design of a vertex detector matched to the challenging requirements of the TeV regime. As well as physics studies and detector simulations, the group is engaged in a dynamic programme of detector R&D, building on the pioneering work in CCD-based pixel detectors carried out at RAL for the past 20 years. You will have the opportunity to participate in all aspects of the programme, including a strong component of laboratory work in which the adventurous requirements for the detectors are being pursued.

Applicants should have a PhD in Particle Physics, or have equivalent experience. Further details of the BaBar post can be obtained from Dr Neil Geddes (Tel +44 (0)1235 445261, email: N.I.Geddes@rl.ac.uk). Further details of the Linear Collider post can be obtained from Prof Chris Damerell (Tel +44 (0)1235 446298, email: C.J.S.Damerell@rl.ac.uk). More information about the RAL Particle Physics Department can be obtained from: <http://hepwww.pp.rl.ac.uk/public/ppd.html>. The salary range is between £18,620 & £26,600 (Pay award pending). Progression within the salary range is dependent upon performance. A non-contributory pension scheme and a generous leave allowance are also offered. Application forms can be obtained from: Operations Group, HR Division, Rutherford Appleton Laboratory, Chilton, Didcot, Oxfordshire, OX11 0QX. Telephone (01235) 445435 (answerphone) or email recruit@rl.ac.uk quoting reference VN1993/00. More information

about CLRC is available from CCLRC's World Wide Web pages at <http://www.cclrc.ac.uk>

All applications must be returned by 17 November 2000.

The CCLRC is committed to Equal Opportunities and to achieving the Investors In People standard. A no smoking policy is in operation.

COUNCIL FOR THE CENTRAL LABORATORY OF THE RESEARCH COUNCILS



Are
you
looking
for...

- Biophysicists and medical physicists
- Rocket scientists
- Electrical engineers
- Software developers
- Technical editors
- Technical sales engineers
- Laser engineers
- Subatomic, nuclear, particle and astrophysicists
- High-, medium- and low-energy physicists
- Cosmologists

For further information and professional recruitment advice on how to promote your position contact Andrew Hardie

Tel. +44 (0)117 9301090 Fax +44 (0)117 9301178
E-mail andrew.hardie@iopublishing.co.uk

RESEARCH ASSOCIATE (Subatomic Physics)

TRIUMF, Canada's national research facility for particle and nuclear physics, is currently seeking 1 or 2 Research Associates who will join the Canadian HERMES group from the University of Alberta, Simon Fraser University and TRIUMF. The main goal of the HERMES experiment is to measure the spin dependent structure functions of the proton and the neutron using deep-inelastic scattering of polarized positrons from polarized gas targets at HERA. However, a rich program of physics using unpolarized targets has emerged, greatly increasing the physics reach of the experiment. The Canadian group is responsible for the transition-radiation detector used to distinguish between positrons and hadrons, and for particle identification algorithms used in the analysis of the data. Our physics analysis efforts currently focus on: the spin structure function $g_1(d)$; semi-inclusive hadron asymmetries and polarized quark distributions; gluon polarization; quark fragmentation functions; and vector meson production. The group has also designed and constructed new drift chambers used in the study of charm production.

The Research Associate(s) will spend a third of the time on hardware support or technical analysis, and the remainder of the time on physics analysis. Incumbents will be expected to spend a significant amount of time at DESY in Hamburg, Germany, and the remaining time will be spent at TRIUMF in Vancouver. Applicants must have a Ph.D. in nuclear or particle physics, and be available to begin as soon as possible. The appointment is initially for two years, but is renewable upon mutual agreement. Salary is commensurate with experience.

TRIUMF is an equal opportunity employer and, while preference will be given to qualified Canadian citizens and permanent residents, we invite all qualified applicants to submit resumes including names of 3 references to: **TRIUMF Human Resources Competition #797-0910, 4004 Wesbrook Mall Vancouver, B.C., Canada V6T 2A3. Fax (604) 222-1074. Further information can be obtained by contacting Dr. C.A. Miller (miller@triumf.ca) or Dr. M. Vetterli (vetm@triumf.ca)**

Tenure Track Assistant Professor - Experimental Particle Physics

The Physics Department at the University at Albany anticipates hiring an Assistant Professor on a tenure track line starting in Fall 2001. The position is subject to final budget approval.

The candidate will be expected to contribute to the existing program in experimental particle physics. Candidates for this position should have a Ph.D. in Experimental Particle Physics and at least three years of post-doctoral experience, specializing in semiconductor particle detectors. We are looking for an outstanding candidate with strong commitment to teaching as well as research. The Albany High Energy Physics Group is part of the CLEO collaboration at Cornell University and the ATLAS collaboration at CERN. Please send resume to

Prof. M. Saj Alam (alam@hepmail.phy.albany.edu)

Faculty Search Committee

Department of Physics (www.albany.edu/physics)

University at Albany

1400 Washington Avenue, Albany, NY 12222.

The University at Albany is an Equal Opportunity/Affirmative Action, Immigration Reform and Control Act, and Americans with Disabilities Act Employer.

Departmental Contact: Ellen Kelly (ebk03@cas.albany.edu)
phone (518) 442-4501, 4500 fax (518) 442-5260.

Associate Scientist

Superconducting Magnet Development

The Technical Division of Fermi National Accelerator Laboratory has available an excellent research position for Associate Scientist in superconducting accelerator magnet development. Our world-class superconducting magnet R&D program is developing state-of-the-art magnets for upgrading the Tevatron, the world's highest-energy collider; for Fermilab's central involvement in CERN's Large Hadron Collider; and for forging the way to the next generation of accelerators. The successful applicant will play a leading role on magnet design, fabrication and testing, and will join an experienced team of physicists, engineers and technicians. Research is directed specifically at Nb_3Sn accelerator magnets of field strength greater than 10 Tesla.

The Associate Scientist position has an initial term of three-years and the possibility of extension and growth into a regular research appointment on the Fermilab scientific staff. A Ph.D. or equivalent in physics or engineering is required, and at least two years experience in experimental high-energy physics, accelerator science, or superconducting magnet or materials technology. The successful candidate must have a demonstrated record of accomplishment as evidenced by publications, reports, and presentations; have leadership potential; and must have good communication skills in English, both oral and written.

Located 40 miles west of downtown Chicago on a campus-like setting, Fermilab provides competitive salaries, an attractive benefits package, and excellent opportunities for personal and professional growth. Please forward a CV and three (3) letters of recommendation to:



Fermilab

Dr. Peter Limon
Fermilab

P.O. Box 500, MS-316
Batavia, IL 60510-0500
U.S.A.

Fermilab is a U.S. Department of Energy National Laboratory and is an Equal Opportunity/Affirmative Action Employer M/F/D/V

UNIVERSITY of GLASGOW

DEPARTMENT OF PHYSICS AND ASTRONOMY

RESEARCH ASSOCIATE IN PARTICLE PHYSICS

£16,775 - £25,213

A position is available, initially for up to two years, to work on the LHCb experiment. We are looking for an outstanding applicant with experience in Experimental Particle Physics who has, or is about to obtain, a PhD. The post is based in Glasgow but will involve periods of work in Geneva and at RAL.

The Glasgow group has made major contributions to the Research and Development of particle identification using the LHCb-RICH detector. We plan a continuing programme of physics simulation and software development together with photon detector development and implementing the mechanics and alignment of the upstream RICH in LHCb.

For further particulars see our website at

<http://ppewww.ph.gla.ac.uk/lhcbfps.html> or E-mail:

p.soler@physics.gla.ac.uk Applications, including CV, publications list, and the names and addresses of two referees, should be sent by 30 Nov 2000, to Prof. D H Saxon, Kelvin Building, University of Glasgow, Glasgow G12 8QQ, Scotland.

The University is committed to equality of opportunity in employment.

The University of Glasgow is an exempt charity dedicated to teaching and research.

URGENT RECRUITMENT?

Reach a global audience immediately with *CERN Courier's* Internet options. Recruitment advertisements are on the Web within 24 hours of booking and are then sent to e-mail subscribers.

Call +44 (0)117 9301031 for more details



**UNIVERSITY OF CALIFORNIA,
SANTA BARBARA
DEPARTMENT OF PHYSICS**

**Faculty Position in Experimental
High Energy Physics**

The Department of Physics at the University of California, Santa Barbara invites applications for an assistant professor position in experimental high-energy physics. The UCSB HEP program is forming a new group to work on hadron-collider physics (CDF and CMS), and it has existing groups working on heavy-quark physics (BaBar and CLEO) and dark-matter searches (CDMS II). The faculty in the group are Claudio Campagnari, Joseph Incandela, Harry Nelson, and Jeffrey Richman. We seek candidates with outstanding ability in both instrumentation and data analysis. The UCSB HEP group has excellent technical resources and staff, as well as a long history of major detector construction projects and analysis results. Information about our program is available at <http://hep.ucsb.edu>.

Candidates for the position should have a Ph.D. or equivalent degree in physics, an outstanding record of scholarship, and should be committed to excellence in teaching. Candidates should submit a statement of current research interests and pursuits, a curriculum vitae, and a list of publications and should arrange for at least three letters of recommendation to be sent to: High Energy Search Committee

Attn: Prof. Jeffrey Richman

Department of Physics

University of California

Santa Barbara, CA, 93106

(E-mail: richman@charm.physics.ucsb.edu; please do not send applications using e-mail attachments.)

Applications will be considered starting January 1, 2001 and will be accepted until the position is filled. The University of California is an Equal Opportunity/Affirmative Action Employer committed to excellence through diversity.

**JOINT TENURE-TRACK FACULTY POSITION
EXPERIMENTAL NUCLEAR/PARTICLE PHYSICS
UNIVERSITY OF NEW MEXICO - RIKEN/BNL RESEARCH CENTER**

The Department of Physics and Astronomy of the University of New Mexico in partnership with the RIKEN BNL Research Center at Brookhaven National Laboratory invites applications for a tenure-track Assistant Professor position in experimental nuclear/particle physics.

We are searching for someone with primary interest in the spin-physics program of the PHENIX experiment at RHIC, as well as its heavy ion program. The department also has activities in particle astrophysics and strangeness physics, and candidates with additional interests in those fields are particularly encouraged to apply. The expected starting date is in August 2001. For the first five years residence at BNL for approximately six months per year will be expected. The minimum requirements for this position include a Ph.D. and a minimum of one year post-doctoral experience in experimental nuclear/particle physics, scholarship in experimental nuclear/particle physics as documented by a publication record, and a commitment to teaching and/or record of teaching experience.

For complete information, see

www.unm.edu/~oeounm/facpost.html.

Application materials, including letters of reference, must be received by December 31, 2000. Candidates must send a curriculum vitae, a list of publications, a brief summary of research and teaching experience, and must arrange for three letters of reference to be sent separately to both Prof. B. Bassalleck, Search Committee Chair, Department of Physics and Astronomy, University of New Mexico, 800 Yale Blvd. NE, Albuquerque, N.M. 87131-1156 (e-mail: Bassalleck@Baryon.phys.unm.edu), and to Professor T.D. Lee, Director, RIKEN BNL Research Center, Building 510A, Brookhaven National Laboratory, P.O. Box 5000, Upton, Long Island, New York 11973.

The University of New Mexico and Brookhaven National Laboratory are Equal Opportunity/Affirmative Action Employers and Educators.

INDEX TO DISPLAY ADVERTISERS

Amptek Inc	26	McLennan Servo Supplies	44
Applied Scintillation Technologies	19	Pantechnik	30
Bergoz	23	PDE Solutions Inc	16
Bicron	20	PPM	23
BOC Edwards - France	44	SAES GETTERS SpA	4
Elsevier Science	48	Silena Germany	16
Goodfellow Cambridge Ltd	4	VAT Vacuum Products Limited	23
Group 3 Technology Ltd	10	Weka AG	16
Hitec Power Protection	10		
Holton Conform	20		
Janis Research Company Inc	44		
Lake Shore Cryotronics Inc	10		

This index is provided as a service and, whilst every effort is made to ensure its accuracy, *CERN Courier* accepts no liability for error