

Two Positions as Heads of Programme

1. Optical materials
2. Plasma and fluid dynamics

As the former heads of the two research programmes have been appointed research professor and head of department, respectively, in the Optics and Fluid Dynamics Department at Risø, the department invites applications for two positions as heads of the two research programmes:

1. Optical materials (OMA). This programme has core competences in polymer optics, laser systems development, optical storage and nonlinear optics. The programme has close contacts with the Danish Polymer Centre and with the Center for Biomedical Optics, which both are collaborative efforts between the Technical University of Denmark and Risø.
2. Plasma and fluid dynamics (PLF). This programme has core competences in fusion plasma physics, nonlinear continuum dynamics and scientific computing. Members of the staff participate in the European programme for the development of controlled nuclear fusion coordinated by Euratom.

Both research programmes have well-developed national and international networks, they participate in the operation of the Graduate School in Nonlinear Science together with the Technical University of Denmark and Copenhagen University, and they have a number of collaborative projects with both academic institutions and private companies.

Qualifications

Each head of programme will assume the scientific and administrative responsibility for a programme comprising 10-20 scientists and technicians. In addition, both programmes have a number of Ph.D. students and post docs involved in research and development.

The successful candidates can document a significant activity at an international level within one or more of the core competences

of the relevant programme. Experience in scientific leadership as well as fund raising ability and contact with industry and academia will be taken into account in the evaluation. The candidates are requested to submit a description of their plans for the programme (max. three pages).

Terms of employment

The terms of employment will be in accordance with those of the Danish scientific staff at Risø National Laboratory. The salary is approximately DKK 445,000 per year including pension scheme (16.6% of the base salary). Depending on qualifications, a higher salary can be negotiated. Based on results defined in an annual performance contract, an additional bonus can be obtained.

A selection committee with external participation will evaluate the qualifications of the candidates.

Information

Further information about the department can be obtained from Head of Department Jens-Peter Lynov (phone +45 4677 4501; e-mail jens-peter.lynov@risoe.dk) and can be found at the website <http://www.risoe.dk/ofd>.

Application

Three copies of the application written in either English or Danish and marked "163-00-OMA" or "162-00-PLF", including relevant material (CV, list of publications, max. ten recent publications, programme plan, etc.) should be sent to

Risø National Laboratory
Personnel Office, Building 776
P.O. Box 49
DK-4000 Roskilde
Denmark

Deadline for submission of applications is 2 October 2000.

The logo for Risø National Laboratory, featuring the word "RISØ" in a stylized, white, serif font on a black rectangular background.

*Risø udfører
naturvidenskabelig og
teknisk-videnskabelig
forskning.
Vi er en statsvirksomhed
under Forskningsministeriet
med en årlig omsætning
på ca. 500 mio. kr.*

www.risoe.dk

L'Institut de physique des particules du Canada Chercheur scientifique

L'Institut de physique des particules (IPP) du Canada invite les intéressés à faire demande pour un poste de Chercheur scientifique. Les postulants doivent de préférence avoir au moins trois années d'expérience postdoctorale et démontrer la portée de leurs contributions en physique des particules. Le Chercheur tiendra conjointement une nomination à un poste académique de recherche dans une université canadienne et aura le droit de demander des subventions de recherche et de diriger des étudiants au niveau de la maîtrise et du doctorat. Le poste peut devenir permanent après trois ans.

Le programme de recherche de l'IPP est principalement axé sur les projets expérimentaux suivants:

- collisions p-p au LHC (ATLAS)
- physique de neutrinos à SNO
- collisions e-e- au LEP (OPAL)
- collisions e-p à HERA (ZEUS)
- collisions e-p polarisés à HERA (HERMES)
- collisions p-p au Tevatron (CDF)
- physique de mésons B à SLAC (BaBar)
- désintégrations rares du kaon à Brookhaven (E949)

Le choix du projet et de l'université fera l'objet d'un accord commun entre l'IPP et le candidat.

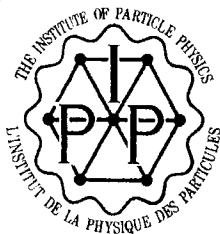
Le curriculum vitae et les noms de trois experts de références doivent être reçus avant le 31 octobre 2000 à:

Prof. R.K. Carnegie, Director
Institute of Particle Physics
Department of Physics
Carleton University
1125 Colonel By Drive
Ottawa, ON, Canada K1S 5B6

fax: 613-520-7546

email: carnegie@physics.carleton.ca

En vertu des lois d'immigration, une préférence sera donnée aux citoyens ou résidents permanents du Canada.



DEPARTMENT OF PHYSICS AND MATHEMATICAL SCIENCES

Lectureships in Particle Physics Phenomenology (x 4 Posts)

£17,755 - £23,256 or £24,227 - £30,967 p.a.

The University of Durham and the UK Particle Physics and Astronomy Research Council (PPARC) have recently announced the setting up, from 1st October 2000, of the Institute for Particle Physics Phenomenology (IPPP) in Durham.

Three Lectureships within the Department of Physics and one within the Department of Mathematical Sciences are now tenable from 1 January 2001. The successful candidates will be members of the IPPP and will also be expected to undertake normal teaching duties within the constituent departments. They will have excellent research records in any area of particle physics phenomenology, and will have an important role to play in the establishment of the Institute as a world-class centre of phenomenology research and a key facility for the UK particle physics community.

Informal enquiries may be made to Professor W J Stirling FRS (IPPP Director-designate, e-mail: W.J.Stirling@durham.ac.uk).

Further details and an application form are available on our website (www.dur.ac.uk/Personnel/vacancies/) or by contacting the Director of Personnel, University of Durham, Old Shire Hall, Durham DH1 3HP (tel: 0191 374 7258; fax: 0191 374 7253 or e-mail: Acad.Recrut@durham.ac.uk).

Closing date: 28 September 2000. Please quote reference A184B.

POSTDOCTORAL RESEARCH ASSOCIATE

The Advanced Accelerator Group of the physics Department at Brookhaven National Laboratory presently has an opportunity for a Research Associate. This group is involved in the design of a muon storage ring-based accelerator complex for the production of intense neutrino beams (Neutrino Factory). The research involves the design of high performance pion production and capture, fr and induction linac phase rotation, ionization colling of muons, acceleration and muons storage rings. The selected candidate is expected to work on the simulation of the front end of the Neutrino Factory and maintain and improve the simulation codes. The position, under the direction of R. Fernow, requires a Ph.D. in Nuclear, Particle or Accelerator Physics, excellent communication skills and the ability to interact effectively in a large group. Desirable experience includes familiarity with accelerator physics issues, strong grasp of electricity and magnetism, familiarity with basic processes of particle interactions in matter, and previous experience in maintaining large computer codes.

Interested candidates should submit a CV, three letters of reference, indicating position MK99999, to: **M.Kipperman, Brookhaven National Laboratory, Bldg. 185, PO Box 5000, Upton, New York 11973-5000.** BNL is an equal opportunity employer committed to workforce diversity.



GSI Darmstadt

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

Postdoctoral Position in Physics/Computing Ref. 2300-00.20

for the analysis and simulation group of the department of Data Processing and Experiment Electronics. The appointed candidate is expected to contribute to the design, the development and the maintenance of software for analysis and simulation of the CERN/LHC experiment ALICE.

A Ph. D. in nuclear or particle physics and strong interest in computing is required. Practical experience in data analysis, software development and object-oriented programming would be preferred. This is an opportunity to develop state-of-the-art software for one of the outstanding experiments of heavy-ion physics.

The appointment 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 e-mail to P.Malzacher@gsi.de.

Applications should be submitted not later than September 29, 2000, to

GESELLSCHAFT FÜR SCHWERIONENFORSCHUNG MBH
PERSONALABTEILUNG
PLANCKSTR. 1
D-64291 DARMSTADT

Experimental Physicist

The Subatomic Physics Group (P-25) seeks an outstanding Experimental Physicist to participate in the BoONE neutrino-oscillation experiment and explore future experiments that draw on the strengths of the Group. The successful candidate will enhance the Group's physics program and participate in a large effort involving institutions from the United States and other countries to develop, coordinate, and mount the next generations of experiments. Examples of areas in addition to oscillations that we are currently investigating include a future neutrino experiment to determine the axial-strange form factor of the proton from neutrino-nucleon scattering and fundamental symmetry measurements with neutrons.

The Subatomic Physics Group at the Los Alamos National Laboratory performs research over a wide range of topics in nuclear, particle, and applied physics. In addition to neutrino physics, the Group investigates heavy-ion collisions (PHENIX), high-energy strong interaction physics (E866/NuSea), the neutron electric dipole moment, quantum computing, and atomic trapping. The Group also performs research and development using hadron radiography and other beam technology relevant to the Science-Based Stockpile Stewardship program. Our experiments are collaborations between national laboratories and universities, and provide a vital link with the academic community. The position requires extensive achievement in physics relevant to neutrino interactions and other fundamental measurements, with a broad knowledge of experimental techniques employed in nuclear and particle physics. Applicants should also have demonstrated capabilities in defining and articulating achievable scientific goals.

For technical questions related to this position, contact Andrea Palounek at atp@lanl.gov.

Interested candidates should submit a written statement explaining how their qualifications match our needs and attach a resume to this statement. For the full text of this job advertisement, see www.hr.lanl.gov/jobs, and look under the Professional section for Job #995201.

To apply, submit a comprehensive resume and cover letter that addresses the specific required and desired criteria, referencing "CERN995201," to the Resume Service Center, Mailstop MSP286, Los Alamos, NM 87545.



Los Alamos
NATIONAL LABORATORY

Operated by the University of California
for the Department of Energy. AA/EOE

www.lanl.gov/jobs



DESY announces several

"DESY Fellowships"

for young scientists in experimental particle physics to participate in the research mainly with the HERA collider experiments H1 and ZEUS or with the fixed target experiments HERA-B and HERMES. New fellows are selected twice a year in April and October.

DESY fellowships in experimental particle physics are awarded for a duration of two years with the possibility for prolongation by one additional year.

The salary for the fellowship is determined according to tariffs applicable for public service work (BAT IIa).

Interested persons, who have recently completed their Ph. D. and who should be younger than 32 years are invited to send their application including a resume and the usual documents (curriculum vitae, list of publications, copies of university degrees) until September 30, 2000 to

DESY
Personalabteilung -V2-
Notkestraße 85, D- 22607 Hamburg

They should also arrange for three letters of reference to be sent until the same date to the address given above.

Handicapped applicants with equal qualifications will be preferred. DESY encourages especially women to apply.

As DESY has laboratories at two sites in Hamburg and in Zeuthen near Berlin, applicants may indicate at which location they would prefer to work. The salary in Zeuthen is determined according to IIa, BAT-O.

BEAM DIAGNOSTIC PHYSICIST/ELECTRONICS ENGINEER

ISIS, Rutherford Appleton Laboratory, Oxfordshire

ISIS is the world's most powerful pulsed spallation neutron source. It consists of a fast cycling 800 MeV proton synchrotron, delivering 2.5×10^{13} protons per pulse at 50 Hz, to a heavy metal target which produces intense pulses of neutrons. The facility provides a wide scientific community with beams of neutrons and muons that probe, on a microscopic scale, the structure and dynamics of condensed matter, and supports several accelerator based research programmes.

There is a post for a Physicist/Electronics Engineer in the Accelerator Physics and Beam Diagnostics Section of the ISIS Accelerator Division. The postholder is required for the development of Beam Diagnostics and the associated electronics on the ISIS accelerators and beam lines. Work will involve interaction with an interdisciplinary team of Engineers, Physicists and Programmers, and will have potential for development into machine physics related work for those interested.

The postholder will be expected to develop beam diagnostics essential to the operational running of ISIS, and also contribute to designs for future projects. Diagnostics devices include beam position monitors, current monitors, profile monitors and loss monitors - requiring digital, analogue and RF electronics, appropriate data acquisition systems and links to control computer systems. Expertise or potential to develop expertise in analogue electronics is essential, and experience will be considered, along with potential for development. Applicants should have a degree or HNC in Physics/Electronic Engineering.

The salary range is between £14,850 and £21,850 or between £18,620 and £26,600 (2000 pay award pending). A non-contributory pension scheme and a generous leave allowance are also offered. For an informal discussion about the post, please contact Adrian Morris, telephone +44 (0)1235 446275, or e-mail a.morris@rl.ac.uk

Application forms can be obtained from: Operations Group, HR Division, Rutherford Appleton Laboratory, Chilton, Didcot, Oxfordshire, OX11 0QX. Telephone (01235) 445435 (answerphone) quoting reference VN1956, or e-mail recruit@rl.ac.uk More information about CCLRC and application forms are available from CCLRC's

World Wide Web pages at <http://www.cclrc.ac.uk>

All applications must be returned by 22 September 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**

THE UNIVERSITY OF VIRGINIA POSTDOCTORAL POSITION IN EXPERIMENTAL NUCLEAR/PARTICLE PHYSICS

The University of Virginia invites applications for a postdoctoral position in experimental nuclear/particle physics with an emphasis on developing and operating solid polarized targets. The group (consisting of Profs. D. Crabb, D. Day and O. Rondon) plays a major role in experiments at SLAC and JLAB using solid polarized targets developed here. For the next 18 months we will be running experiments with these targets in Hall B and Hall C at JLAB. Applicants must have a Ph.D. in experimental nuclear or particle physics; experience with cryogenics and familiarity with the operation of polarized targets is highly desirable. The successful candidate will be responsible for the development of dilution refrigerator based solid polarized targets for future experiments and participate in the group effort at JLAB. Opportunities for working on experiments at other laboratories will arise during the term of the appointment.

These are initially one-year positions, with the possibility of extension for one or two more years contingent upon mutual agreement and the availability of funds. The position will be available immediately and will remain open until filled. Applicants should submit a resume, summary of research interests and arrange to have three letters of recommendation sent to: Experimental Nuclear/Particle Physics Positions, University of Virginia, Department of Physics, 382 McCormick Road, P.O. Box 400714, Charlottesville, VA 22904-4714 (ATTN: TAMMIE SHIFFLETT)

Informal inquiries may be addressed to Prof. Donald Crabb (dgc3q@virginia.edu).

The University of Virginia is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.

the National Laboratory for Heavy-Ion Research, a member institute of the Helmholtz-Society of German Research Centers, invites applications for two group leader positions for physicists or electrical engineers

1. Radiofrequency Group Leader

Ref. 3420-00. 27

The group leader will take overall responsibility for the radio-frequency systems of the linear accelerator UNILAC, the synchrotron SIS, and the storage ring ESR. The position requires the experience and maturity to manage a team of technical staff (18 physicists, engineers, and technicians) and the innovative ability to make a major distribution to the development of new rf-systems.

2. Beam Diagnostic Group Leader

Ref. 3410-00.28

The group leader will take the responsibility for the beam diagnostic systems of all GSI accelerators with a team of technical staff (15 physicists, engineers, and technicians). He has a background of several years in accelerator physics, beam diagnostic instrumentation, analog and digital electric system design, and central system computers.

The group leaders take the responsibility for the efficient operation of the running technical systems, for the improvement of operation, and for the development of new systems for the existing and for new accelerators. In addition, it is also expected that the group leaders take the responsibility for the design and construction of future new accelerator facilities at GSI.

Women are especially encouraged to apply for the position. Handicapped applicants will be given preference to other applicants with the same qualification.

Candidates are invited to send their application including a curriculum vitae, list of publications as well as three letters of reference not later than September 29, 2000, to

GESELLSCHAFT FÜR SCHWERIONENFORSCHUNG MBH
PERSONALABTEILUNG
PLANCKSTR. 1
D-64291 DARMSTADT



The Faculty of Natural Science and Mathematics invites applications for the position of a

PROFESSOR (C3) IN EXPERIMENTAL PHYSICS

at the Physics Institute of Bonn University, which is available from the 1st of March 2001.

We are seeking a highly qualified candidate with a strong record of achievement in hadron physics at medium energies. We expect the appointee to be active in the research program using the beam of the 3.5 GeV electron accelerator ELSA. The research at ELSA is funded by the 'Deutsche Forschungsgemeinschaft' in the framework of a special program: Investigations of the hadronic structure of nucleons and nuclei by electromagnetic probes.

The new professor is expected to participate in teaching physics in all phases of the curriculum.

The University of Bonn specifically encourages female candidates to apply.

Please submit your application with a curriculum vitae and a list of publications no later than September 30, 2000 to: Vorsitzender der Fachgruppe Physik-Astronomie, Endenicher Allee 11-13, 53115 Bonn, Germany.

Associate Scientist

The Beams Division of Fermi National Accelerator Laboratory (Fermilab) has an excellent opportunity for an Associate Scientist. The successful candidate will be expected to focus on accelerator physics relevant to the Fermilab research program, but will also have some opportunity for self-directed research. The duties will include advanced calculations and modeling of accelerator systems and particle beam motion including experiments in particle beam physics. The work will support Fermilab accelerators as well as studies of future accelerator facilities and advanced accelerator techniques.

The Associate Scientist position carries an initial three-year appointment with a possible extension and consideration for a regular position on the Fermilab scientific staff. A Ph.D. in Physics is required and two or three years experience in accelerator physics, high energy physics or a related field. Expertise in intensity dependent effects and beam instabilities is desired.

Located 40 miles west of downtown Chicago, on a campus-like setting, Fermilab provides competitive salaries and exceptional benefits, including medical/dental/life, 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, IL 60510-0500 U.S.A. EOE M/F/D/V



PHYSICIST

The Physics Department of Brookhaven National Laboratory (BNL) presently has an opportunity for a physicist to work in the Omega Group on the ATLAS experiment at the LHC at CERN. BNL is playing a leading role in the construction of the liquid argon calorimeter and is responsible for managing the overall U.S. effort in the Liquid Argon Subsystem. The successful candidate will be expected to take a leadership role in defining and carrying out our physics role in ATLAS, will be involved in the development and construction of the readout electronics chain and cryostat and cryogenics for the Barrel EM calorimeter and be expected to take a leading role in the U.S. liquid argon subsystem management. The position, under the direction of D. Lissauer, requires a Ph.D. in experimental particle physics with a strong background in calorimetry and experience in construction and commissioning of large detectors highly desirable.

Interested candidates should submit a CV, three letters of reference, indicating position MK8895 to: M. Kipperman, Brookhaven National Laboratory, Bldg. 185, P.O. Box 5000, Upton, NY 11973-5000. BNL is an equal opportunity employer committed to workforce diversity.

BROOKHAVEN
NATIONAL LABORATORY

Staff Scientist Position

at the
LIGO Laboratory,
California Institute of Technology (Caltech).

The Laser Interferometer Gravitational-Wave Observatory (LIGO) Laboratory is seeking to fill a three-year term position for staff scientist at its Livingston, Louisiana Observatory. The position may be converted at a later date to a long-term appointment subject to available funding. The successful candidate will become a member of the observatory staff with primary responsibility to participate locally in the LIGO Laboratory Data and Computing Group activities. Primary responsibilities will include: site support for LIGO Data Analysis System hardware and software; and participation in the scientific data analysis for astrophysical signatures from gravitational waves associated with compact relativistic objects.

Skills we are seeking include: Linux/Solaris administration background; MPI based parallel computational background; training in astronomy, astrophysics or physics; programming experience in C and C++ and/or tcl / tk; knowledge of computer hardware systems, ability to repair computer equipment, install computer equipment, maintain computer equipment. The ideal candidate would have a deep-seated commitment to successfully implement and use the LIGO computational resources for astrophysical research in near real time at the site. He or she should have a can-do attitude that includes openness to learning new skills as they are needed, and the ability to work in a collegial manner with others both locally and remotely.

Letters of interest should be sent to Dr. Albert Lazzarini, California Institute of Technology, LIGO 18-34, Pasadena, Ca 91125, and must include a resume with a minimum of three references listed. Further information may be obtained from Dr. Lazzarini at lazz@ligo.caltech.edu.

*Caltech is an Affirmative Action/Equal Opportunity Employers.
Women, Minorities, Veterans, and Disabled Persons
are encouraged to apply.*



The Deutsches Elektronen-Synchrotron DESY is a national physics research laboratory with 1400 employees and more than 3000 guest scientists from Germany and abroad. The scientific program includes research in particle physics and synchrotron radiation.

In the framework of an international collaboration a Free-Electron-Laser is set up at DESY for wavelengths far below the visible. The project is based on the superconducting TESLA test facility, which supplies the technological foundation for a future linear accelerator for electron-positron collision experiments. Within this framework we search several physicists with Ph.D. for the development, construction and commissioning of sophisticated components of the electron accelerator.

We are looking for a

Scientist or Diplom-Engineer (m/f)

The successful applicants will have responsibility for the coordination of work already in progress and/or for the construction and commissioning of self-developed components.

The qualification should be Ph.D. in physics or electrical engineering and preferably appropriate experience in accelerator physics and techniques. The ability to coordinate sophisticated technological work in international collaboration is desired.

The contract will be unlimited. The salary will be according to the German Civil Service (BAT).

Interested applicants are invited to send their letter of application and three names of referees to

DESY, Personalabteilung, Notkestraße 85, D- 22603 Hamburg
by September 30, 2000 **Code-number: 64/2000**
phone 040/8998-3617 **www.desy.de**

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



Thomas Jefferson National Accelerator Facility

POSTDOCTORAL POSITION

(Position #PT2113)

Thomas Jefferson National Accelerator Facility is a DOE-sponsored laboratory operated by the Southeastern Universities Research Association. Jefferson Lab's primary mission is to study strongly interacting matter with multi-GeV electromagnetic probes. The experimental program includes both high energy nuclear physics and low energy particle physics. The laboratory routinely operates up to 5.5 GeV beam energy.

Jefferson Lab invites applications for a post-doctoral research associate position in the Hall C group. The core Hall C equipment consists of two focussing magnetic spectrometers, high power 1.2H and 3.4He cryogenic targets, and dynamically polarized H and D targets. Flexibility is the key to the Hall C program therefore special purpose detectors and targets are brought in as needed. Operating since late 1995, our publication and Ph.D. production streams are well established. Our experimental program for the next few years includes two measurements of the neutron electric form factor, inclusive measurements on nuclei in the nucleon resonance region, further measurements of the pion charge form factor, and the G0 parity violation experiment. The successful candidate will play a role in the preparation, data-taking, and analysis for these experiments, and assist in the design of future experiments. Leadership roles in already approved and scheduled experiments are possible by mutual agreement with experiment spokespersons.

A Ph.D. in experimental nuclear, particle, or high-energy astrophysics is required. Experience in analyzing data from intermediate/high energy experiments is essential, and a background in lepton-nucleus physics would be a plus. The appointment will be made initially for one year and is renewable. Applicants should send a curriculum vitae, copies of any recent (un)published work, and arrange to have letters from three references sent to: Employment Manager, Mail Stop 28A, TJNAF, 12000 Jefferson Avenue, Newport News, VA 23606.

Jefferson Lab is an Affirmative Action/Equal Opportunity Employer.

ACCELERATOR PHYSICIST

ISIS, Rutherford Appleton Laboratory, Oxfordshire

Applications are invited for a vacancy in the Accelerator Theory and Future Projects Group, which is part of the ISIS Accelerator Division at RAL. The Group is involved with development of the existing ISIS facility and collaborates with laboratories worldwide in theoretical studies for future accelerator projects.

Candidates should have a first degree in Physics or Mathematics and a Ph.D. or equivalent in accelerator theory or a closely related subject. A sound mathematical background and knowledge of computer modelling techniques would be an advantage.

The salary range is between £18,620 and £26,600 (pay award pending). A non-contributory pension scheme and a generous leave allowance are also offered. For an informal discussion about the post, please contact Dr CR Prior, telephone +44 (0)1235 445262, or e-mail c.r.prior@rl.ac.uk

Application forms can be obtained from: Operations Group, HR Division, Rutherford Appleton Laboratory, Chilton, Didcot, Oxfordshire, OX11 0QX. Telephone (01235) 445435 (answerphone) quoting reference VN1968, or e-mail recruit@rl.ac.uk. More information about CCLRC and application forms are available from CCLRC's World Wide Web pages at <http://www.cclrc.ac.uk>

All applications must be returned by 29 September 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**





Thomas Jefferson National Accelerator Facility

STAFF SCIENTIST POSITION (POSITION NO: PR2162)

Thomas Jefferson National Accelerator Facility is a DOE-sponsored laboratory operated by the Southeastern Universities Research Association. Jefferson Lab's primary mission is to study strongly interacting matter with multi-GeV electromagnetic probes. The experimental program includes both high energy nuclear physics and low energy particle physics. The laboratory routinely operates up to 5.5 GeV beam energy.

Jefferson Lab invites applications for a Staff Scientist position in the Hall B group. The CEBAF Large Acceptance Spectrometer (CLAS) in Hall B is instrumented with wire chambers, scintillation counters, gas Cerenkov detectors, and electromagnetic calorimeters. The data acquisition and control of the detector components is accomplished with a cluster of SUN Unix processors in the control room and with approximately 30 distributed controllers/processors in the hall connected by Ethernet. As a member of the CLAS team, the candidate will be responsible for all on-line aspects of the CLAS data flow.

A Ph.D. in Experimental Physics is required. At least 2 years experience with hardware aspects and software development for complex experimental physics detectors. Proven track record of significant contributions to on-line software and hardware projects, particularly expertise in modern computing and networking techniques. Good working knowledge of UNIX, fluent in Fortran and C as well as several scripting languages, such as Perl, Tcl/Tk, csh, etc. Knowledge of C++ and experience with HTML documents desirable. Good verbal and written communication skills required. Applicants should send a curriculum vitae, copies of any recent (un)published work, and arrange to have letters from three references sent to: Employment Manager, Mail Stop 28A, TJNAF, 12000 Jefferson Avenue, Newport News, VA 23606.

Jefferson Lab is an Affirmative Action/Equal Opportunity Employer.

ACCELERATOR PHYSICIST

TRIUMF, Canada's national research facility for particle and nuclear physics, is seeking a junior to intermediate Accelerator physicist to take responsibility for operational and developmental aspects of the 500 MeV cyclotron, and the 1.5 MeV/u linear accelerator for exotic ions.

Qualified applicants will have a relevant PhD in physics or engineering physics, or the equivalent education, with demonstrated, practical hands-on experience acquired in an accelerator laboratory. Ideally, the post-graduate degree, or previous work experience, will be in the fields of beam physics or accelerator physics, preferably with cyclotrons. Previous laboratory experience will include familiarity with beam dynamics or optics, rf accelerator structures, instrumentation and diagnostics. Familiarity with beam transport lines, high voltage devices, super-conducting structures, controls, beam techniques and safety standards will be considered an asset. The successful candidate will have demonstrated initiative, sound judgement, and excellent interpersonal skills. A strong academic background with thorough knowledge of electromagnetism, and a basic knowledge of accelerator engineering and physics, are essential.

TRIUMF is an equal opportunity employer offering a salary commensurate with experience, and a competitive benefit package. All qualified applicants are invited to submit their resumes as soon as possible but no later than October 20, 2000, quoting competition number 784-0624 to:

TRIUMF

TRIUMF, Attention:
Human Resources,
4004 Westbrook Mall,
Vancouver, BC V6T 2A3
Fax: (604) 222-1074

Laboratori Nazionali di Frascati dell'INFN

European Community - Access to Research Infrastructures
action of the Improving Potential Programme

2nd Call for Proposals

The Laboratori Nazionali di Frascati (LNF) of Istituto Nazionale di Fisica Nucleare (INFN), Italy, have been recognized by the European Union as a Major Research Infrastructure, for the period 1 March 2000 - 28 February 2003 (Contract No. HPRI-CT-1999-00088). This Contract offers the opportunity for European research groups, performing or planning a research activity at LNF, to APPLY FOR E. U. FUNDED ACCESS TO THE LNF 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 LNF, 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 November 14th, 2000, to:

LNF Director, TARI
INFN, Lab. Naz. di Frascati
Via E. Fermi, 40
I-00044, FRASCATI

More information can be obtained visiting our website at
<http://www.lnf.infn.it/cee/>, or from the TARI secretariat,
e-mail: tari@lnf.infn.it, fax: ++39-06-9403-2582.

GSI Darmstadt

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

Postdoctoral Position Ref. 1200-00.27

in the nuclear spectroscopy group.

The opening is for the European EXOTAG project aiming at the realization of nuclear instrumentation for exotic nuclei separators of GSI, JYFL (Jyväskylä) and GANIL (Caen). The project includes development of new preamplifiers for granular Si- and Ge-detectors and digital pulse shape analysis techniques as well as implementation and commissioning experiments of the new detection system. For further information please contact Dr. J. Gerl at GSI (j.gerl@gsi.de).

We seek candidates with experience in nuclear instrumentation and electronics and background in nuclear spectroscopy.

The appointment will be limited to 4 years. Applicants should not be older than 32 years. Salary follows BAT IIa.

Women are especially encouraged to apply for the position. Handicapped applicants will be given preference to other applicants with the same qualification.

Applications including CV, publication list and two letters of reference should be sent not later than September 29, 2000, to

GESELLSCHAFT FÜR SCHWERIONENFORSCHUNG MBH
PERSONALABTEILUNG
PLANCKSTR. 1
D-64291 DARMSTADT

POSTDOCTORAL POSITION IN EXPERIMENTAL PARTICLE PHYSICS

The BaBar Group of the Physics Division at the E.O. Lawrence Berkeley National Laboratory has an opening for a Visiting Postdoctoral Physicist. The BaBar detector is fully operational at PEP-II B-factory and has been actively taking data since Summer 1999. The Berkeley group has major commitments in the following areas: Silicon Vertex Tracker (SVT), DIRC particle ID system, trigger, online and offline computing. Physics analysis of the rapidly accumulating data set is a high priority.

Qualified candidates should have a Ph.D in particle physics and demonstrated strong potential for outstanding achievement as an independent researcher. The primary responsibility of this position will be physics analysis as well as some hardware development.

This is a two-year term appointment with the possibility of renewal. The salary range is \$3,640-\$4,295/month. Applications, including CV, list of publications, description of skills, and three letters of recommendation should be sent via e-mail to gsciemployment@lbl.gov or mail to Lawrence Berkeley National Laboratory, 1 Cyclotron Road, MS 50-4037, Berkeley, CA 94720. Please reference Job# PH011898. E-mail inquiries to gsciemployment@lbl.gov. For more information, please visit our web site www.lbl.gov/CJO. Berkeley Laboratory is an AA/EEO employer.



The Deutsches Elektronen-Synchrotron DESY is a national physics research laboratory with 1400 employees and more than 3000 guest scientists from Germany and abroad. The scientific program includes research in particle physics and synchrotron radiation.

In the framework of an international collaboration, DESY is developing a Free Electron Laser for wavelengths far below the visible. After the successful proof-of-principle demonstration in the first phase of the project, a user facility will now be constructed to provide a worldwide community with unprecedented radiation quality. The project is based on the superconducting TESLA Test Accelerator Facility, which provides the technological basis for a future high-energy electron-positron linear collider.

A key contribution to the success of this installation will be the development, construction and commissioning of a number of advanced electron accelerator components.

Within the scope of this activity, DESY Hamburg invites applications for

several Postdoctoral positions in Experimental Physics or Electrical Engineering

The successful candidate will be responsible for coordination of work already under way and/or for construction of components to be designed by him/herself. He/She will find an optimum environment for professional training.

The contract will be limited to 3 years. The salary will be according to the German Civil Service (Ila MTV Angestellte).

Scientists who have recently finished their Ph. D., have experience in this field and are not more than 32 years old, are invited to send their letter of application and three names of referees to

**DESY, Personalabteilung, Notkestraße 85, D- 22603 Hamburg
by September 15, 2000 Code-number: 50/2000**

Handicapped applicants will be given preference to other applicants with the same qualification. DESY encourages especially women to apply.



Universität Heidelberg

The Kirchhoff-Institut für Physik invites applications for the position of a

Physicist or Electrical Engineer

The position is located at the ASIC laboratory of the faculty of physics and astronomy, in which application specific integrated circuits for various research projects of the faculty are being developed. As the head of the design department, the successful candidate will lead and/or participate in the chip design itself, but also be responsible for the installation and maintenance of the CAD software and design libraries. Additional tasks include the technical support to users in house.

Current developments of the laboratory include digital, analogue, mixed-signal chips and integrated sensors to be used in research projects in the areas of particle physics and medical physics. More information can be found at <http://www ASIC.ihep.uni-heidelberg.de/ASIC/>.

Applicants should have a surpassing degree in physics or electrical engineering and a profound knowledge in the area of microelectronics or communications engineering.

The salary will be according to the German salary scale BAT.

Letters of application including the usual documents should be sent by October 1st to:

**Universität Heidelberg, Kirchhoff-Institut für
Physik, c/o Prof. K. Meier, Ref. ASIC-Ingenieur,
Schröderstr. 90, 69120 Heidelberg, Germany.**

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**

Telephone +44 (0)117 930 1090

Fax +44 (0)117 930 1178

E-mail andrew.hardie@iopublishing.co.uk



Thomas Jefferson National Accelerator Facility

TECHNICAL ASSOCIATE POSITION (POSITION NO: PR4022)

Thomas Jefferson National Accelerator Facility is a DOE-sponsored laboratory operated by the Southeastern Universities Research Association. Jefferson Lab's primary mission is to study strongly interacting matter with multi-GeV electromagnetic probes. The experimental program includes both high energy nuclear physics and low energy particle physics. The laboratory routinely operates up to 5.5 GeV beam energy.

Jefferson Lab invites applications for a Cryogenic Target Technical Associate position in the Polarized Target group of the Physics Division. This position will support all aspects of the operation of cryogenic and polarized targets at the lab. Candidate will be required to assemble and test cryogenic equipment, vacuum systems and electronic control systems employed in cryogenic targets, and will perform mechanical design work using standard CAD software packages. Duties will include the preparation of hardware and software for target controls and instrumentation. Will serve as on-call expert in target system operation.

A Bachelor's Degree in Physics or Engineering Technology, an Associates Degree plus 10 years experience, or the equivalent combination of education and relevant experience required. Successful candidate will have strong hands on technical skills, ability to operate standard electronic test equipment, perform basic machining tasks and design and assemble simple electronic circuits. Familiarity with UNIX and NT operating systems required. Applicants should send a resume to: Employment Manager, Mail Stop 28A, TJNAF, 12000 Jefferson Avenue, Newport News, VA 23606.

Jefferson Lab is an Affirmative Action/Equal Opportunity Employer.



THE UNIVERSITY OF SHEFFIELD

DEPARTMENT OF PHYSICS & ASTRONOMY

POSTDOCTORAL RESEARCH ASSOCIATE

A post is available within the Sheffield Group to work on the ATLAS experiment from 1 November 2000, initially for a period of 2 years with the possibility of renewal. The present post is expected to concentrate on work within the SCT project, initially on the testing of irradiated detectors and subsequently in the assembly and testing of the SCT endcap at CERN. Candidates should have, or be about to gain, a PhD in experimental particle physics. Relevant experimental hardware experience would also be valuable.

Salary £16,775 - £25,213 pa, depending on experience.

Closing date for applications: 6 September 2000. (Ref: R2103)

An Equal Opportunity Employer

For details of this post, E-mail: jobs@sheffield.ac.uk
or Tel: 0114-222 1631 (24hr).

Please quote the post reference in all enquiries

Vacancy Web Site: <http://www.shf.ac.uk/jobs/>

SENIOR FACULTY POSITION IN EXPERIMENTAL PARTICLE PHYSICS

The Department of Physics at the University of Alberta invites applications for a new senior position in experimental particle physics with starting date on or after July 1, 2001. The successful candidate will be appointed with tenure at either the associate or full professor rank depending on qualifications and experience. We are interested in candidates who have an excellent record of leadership and achievement in research and who will complement our existing program. These qualities plus ability and interest in teaching at graduate and undergraduate levels will constitute the important selection criteria.

The current program of experimental research includes:

Collider Physics: The OPAL and ATLAS experiments at CERN.

Fixed Target Experiments: The HERMES experiment at DESY; Rare Kaon Decays (exp. 787 AND E949 at Brookhaven); Tests of Weak Interaction in Muon Decay (exp. 614 at TRIUMF); ISAC Radioactive isotope beam Physics at TRIUMF and Charge Symmetry Breaking (exp. 704 at TRIUMF).

Astroparticle Physics: Alberta Large area Time correlation Array (ALTA) and the STACEE gamma ray experiment.

Potential candidates may find additional information about the research program at csr.phys.ualberta.ca.

Applicants should send a curriculum vitae and names of at least three referees who are willing to provide confidential assessments by January 1, 2001 to:

Experimental Particle Physics Search and Selection Committee

Dr. J. Samson, Chair

University of Alberta

412 Avadh Bhatia Physics Laboratory

Edmonton, Alberta, T6G 2J1, Canada

Fax: (780) 492-0714

Email: dept@phys.ualberta.ca

The records arising from this competition will be managed in accordance with provisions of the Alberta Freedom of Information and Protection of Privacy Act (FOIPPA).

The University of Alberta hires on the basis of merit. We are committed to the principle of equity of employment. We welcome diversity and encourage applications from all qualified women and men, including persons with disabilities, members of visible minorities, and Aboriginal persons.

The Boston University Physics Department invites applications for postdoctoral positions in Particle Astrophysics/Neutrino Physics.

Our research focus is experimental tests of Grand Unified Theories, particularly through proton decay and neutrino oscillations. The position will involve participation in the Super-Kamiokande experiment and/or K2K Long Baseline experiment. In addition, we anticipate research and development for next generation experiments. The candidate should expect travel to Japan of various duration depending on the schedules of shifts, meetings, and research duties. For more information, see our group homepage at <http://hep.bu.edu/~superk>.

Interested candidates should submit a curriculum vitae and have three letters of recommendation sent to: Prof. Edward Kearns, Boston University Physics Department, 590 Commonwealth Ave., Boston, MA 02215. Applications and recommendations may be sent via email to kearns@hep.bu.edu.

Boston University is an equal opportunity affirmative action employer.

CERN COURIER RECRUITMENT BOOKING DEADLINES

Oct: 8 September **Nov:** 13 October **Dec:** 17 November

Contact Andrew Hardie:

Tel. +44 (0)117 930 1090 **Fax** +44 (0)117 930 1178

E-mail andrew.hardie@iopublishing.co.uk