

RECRUTEMENT

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PHYSICIST/DEVELOPER

Brookhaven National Laboratory's Physics Department seeks a SR. APPLICATIONS ENGINEER (I-8) for a term appointment. Requirements include a Ph.D. in high energy or nuclear physics and a strong background in computing. Three years of related experience and expertise in C++ is required; familiarity with grid computing, web services, python, java, and mass storage systems desirable. Database experience is strongly preferred, experience in the collaborative development of core offline software in large experiments is desirable. Will participate in the development of the core offline software of the ATLAS experiment at the LHC, with a particular focus on the data storage, data management and database challenges presented by the petabyte-scale data volumes of ATLAS. The Physics Applications Software Group responsible for the development of the physics data management system and the distributed data analysis system of ATLAS. This position will be based at Brookhaven or CERN, depending on preference and responsibilities.

Brookhaven offers a stimulating work environment and a comprehensive benefits package. For consideration, please forward your resume, responding to Position #NS3177, to: Nancy L. Sobrito, Brookhaven National Laboratory, P.O. Box 5000, Bldg. 185-HR, Upton, NY 11973. BNL is an equal opportunity employer committed to workforce diversity.

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Applications are invited for a post-doctoral position at LIP-Lisbon (www.lip.pt).

Applications are invited for a post-doctoral position at LIP-Lisbon (www.lip.pt). The position is funded by the European Research Training Network 'Physics Reconstruction and Selection at the Large Hadron Collider' (<http://cern.ch/sphicas/PRSATLHC/>). The main purpose of the proposed network is to study, design and implement the physics event selection of the CMS experiment in the LHC environment.

The position will be given for 2 years with a highly competitive salary determined according to qualification. Qualifications required include a PhD or equivalent in High Energy Physics, and a clear demonstration of the ability to carry out a research program. Knowledge of modern programming techniques, Object-Oriented software and C++ will be an asset.

Applicants must satisfy the EU RTN eligibility criteria
(<http://www.cordis.lu/improving/networks/faq.htm#q5>).

The position will remain open until suitable candidates are found.

Applications, including CV and reference letters, should be sent to:
**Laboratory for Instrumentation and Experimental Particle Physics
Research Training Network-PRSATLHC**

Av. Elias Garcia, n° 14 -1°, 1000-149 LISBON, PORTUGAL
e-mail: joao.varela@cern.ch



The University of Sheffield

Department of Physics & Astronomy Postdoctoral Physicist in Particle Physics

£18 - £28K pa

The appointee will develop energy flow reconstruction software for the ATLAS experiment at the CERN Large Hadron Collider (LHC) in Geneva. They will have extensive experience of Object Oriented programming techniques. The post holder should be self-motivated and possess a PhD or equivalent in particle physics or a related discipline, preferably with a strong computing element. Excellent problem solving and communication skills are also required. The post will involve regular travel to Geneva to present the results of work and is available from 1 July 2004 for up to 3 years.

Closing Date: 14 June 2004 Ref. R3313

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For full post details/application pack visit:

www.sheffield.ac.uk/jobs or

email: jobs@sheffield.ac.uk

tel: 0114 222 1631 (24hr)

Please quote Ref. in all enquiries

POSTDOCTORAL ASSOCIATE LABORATORY FOR NUCLEAR SCIENCE

The Laboratory for Nuclear Science at MIT has immediate openings for postdoctoral research associates within the Hadronic Physics Group. The group is seeking research associates to join the experimental programs currently underway at the MIT-Bates Linear Accelerator Laboratory, the Thomas Jefferson National Accelerator Facility (JLab), and at the MAMI facility in Mainz.

The BLAST experiment at the MIT-Bates Laboratory utilizes a polarized electron beam, polarized gas targets of ^1H , ^2H , and ^3He , and a large acceptance general purpose detector to study the spin dependent electro-magnetic interaction. This experiment will provide precise, systematic measurements of the nucleon form factors as well as study the structure of few-nucleon systems. The experiment has begun collecting data and we are looking for someone to take a leading role in the ongoing analysis. Bates is located approximately 20 miles north of MIT.

The experiments at JLab in Newport News, Virginia and at MAMI in Mainz, Germany are complementary precision measurements of parity violating asymmetry in electron - proton elastic scattering. These measurements will determine the contribution due to strange quarks in the proton form factor and permit a measurement of the weak form factors G_E^s and G_M^s . A new experiment, QWEAK, is being designed to measure the weak charge of the proton $Q_w^p = 1 - 4\sin^2 \Theta_w$ at low Q^2 for comparison with the theoretical Q^2 evolution of the weak mixing angle $\sin^2 \Theta_w$. A successful candidate could be based either at JLab or Mainz.

Applicants should have a Ph.D. in experimental nuclear or particle physics. Interested candidates should provide a curriculum vita, publication list, and arrange for three letters of reference to be sent to: **Prof. R.P. Redwine, 4-110, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA 02139-4307.**

MIT is an Affirmative Action/Equal Opportunity Employer. Qualified women and minority candidates are especially encouraged to apply.



Massachusetts Institute of Technology

web.mit.edu/hr



THE UNIVERSITY of LIVERPOOL

Department of Physics

Lecturer in Physics

£22,191 - £33,679 pa (under review)

Opportunities exist for an outstanding physicist with research interest in Experimental Particle Physics, to lead part of a vibrant research programme (<http://hep.ph.liv.ac.uk/>) at the energy and symmetry frontiers. Current experiments include ATLAS and LHCb at CERN, H1 at DESY, BABAR at SLAC and CDF at Fermilab. Future experiments include neutrino and e+e- physics. Detector and accelerator R&D underpin these activities. Facilities include the Semi-Conductor Detector Centre, large computing farms, and the Cockcroft Institute for Accelerator Science. You will contribute in an innovative way to teaching in the Department. (Visit <http://www.ph.liv.ac.uk/admissions/admissions.html>).

Informal enquiries to Professor John Dainton on +44 151 794 7769, email: jbd@hep.ph.liv.ac.uk

Quote Ref: B/256/CC

Senior/Principal Experimental Officer in Particle Physics

£21,125 - £33,679 pa (under review)

Working within the Liverpool ATLAS Particle Physics Group, you will contribute to the building, commissioning and operation of the ATLAS Forward Semiconductor Tracker and will be expected to participate in the preparation of ATLAS physics analyses.

You will possess a PhD in Experimental Particle Physics or equivalent background and will normally have several years' relevant experience. The post is funded by PPARC for three years initially. You will be expected to spend time at CERN as appropriate. Informal enquiries to Professor Paul Booth on +44 151 794 3363, email: booth@hep.ph.liv.ac.uk or Professor Phil Allport on +44 151 794 7733, email: allport@hep.ph.liv.ac.uk

Quote Ref: B/252/CC

Closing date for both posts: 2 July 2004

Further particulars and details of the application procedure should be requested from the Director of Personnel, The University of Liverpool, Liverpool L69 3BX on +44 151 794 2210 (24 hr answerphone), via email: jobs@liv.ac.uk or are available online at <http://www.liv.ac.uk/university/jobs.html>

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PENNSTATE



POSTDOCTORAL POSITION

X-Ray and Neutron Scattering Studies of Confined Systems
THE PENNSYLVANIA STATE UNIVERSITY

The Department of Physics at Penn State University is looking to fill a postdoctoral research associate position to study the structure and dynamics of liquids and solids in confined geometries and on surfaces by x-ray and neutron scattering. Candidates must have a Ph.D. in Physics, Chemistry, or related fields; with experience in x-ray or neutron scattering techniques.

Deadline for applications is 1 July 2004 or until the position is filled. Please send application, including vita, statement of research, and at least two letters of recommendation, to Prof. Paul Sokol, PMB#184, Department of Physics, 104 Davey Laboratory, Penn State University, University Park, PA 16802 USA.

Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce.

Deutsches Elektronen-Synchrotron
Particle Physics



DESY is world-wide one of the leading accelerator centres exploring the structure of matter. The main research areas range from elementary particle physics over various applications of synchrotron radiation to the construction and use of X-ray lasers.

The group is involved in the operation and upgrade of the H1 detector at the ep collider HERA as well as in physics analysis of the collected data. We have an opening for an

Experimental Particle Physicist (Ph.D)

You will actively participate in the scientific program of the H1 experiment and in the development of new detectors for applications at future projects of DESY.

You have a Ph.D. in physics and several years of experience in experimental particle physics in the framework of a large experiment. In particular you have outstanding knowledge in the construction and operation of precision track detectors for charged particles and in the reconstruction of their data. If you are interested in this position and you fulfill these requirements, please send your complete application papers to our personnel department. For further information, please contact Mr. Niebuhr on +49 40/8998-4594.

Salary and benefits are commensurate with public service organisations. DESY operates flexible work schemes, such as flexitime or part-time work. DESY is an equal opportunity, affirmative action employer and encourages applications from women.

Deutsches Elektronen-Synchrotron DESY

member of the Helmholtz Association

code: 43/2004 • Notkestrasse 85 • D-22603 Hamburg • Germany

Phone: +49 40/8998-3392 • www.desy.de

email: personal.abteilung@desy.de

Deadline for applicants: 27th June 2004



UNIVERSITY
of
GLASGOW

DEPARTMENT OF PHYSICS AND ASTRONOMY

Research Associate in Experimental Particle Physics

£18,265 - £27,339 (under review)

You will work on analysis for the CDF experiment Fermilab Tevatron and preparation of the ATLAS experiment at the CERN Large Hadron Collider, focusing on physics analysis, including use of our CDFGrid and ScotGrid e-science facilities, and participation in semiconductor tracker construction for ATLAS. You will have, or expect soon to receive, a PhD in experimental particle physics. Available until 31 August 2007.

Informal enquiries can be made to Dr Richard St Denis, +44 (0)141 330 5887 or email: r.stdenis@physics.gla.ac.uk

For further information on the post and method of application see <http://ppewww.ph.gla.ac.uk/PPERAad.html> Please quote Ref 10529/L/A3.

Closing date: 25 June 2004.

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VACUUM SCIENTIST

(Research Associate)

Cornell University

Vacuum Scientist at the Laboratory for Elementary-Particle Physics (LEPP), Cornell University, to join the Vacuum Group responsible for maintaining and improving the vacuum systems of the high energy particle accelerators, consisting of the CESR electron-positron storage ring and its injectors (a Synchrotron and a Linac); and participating in R&D efforts in developing vacuum systems capable of extreme high vacuum (XHV) for the Cornell Energy Recovery Linac (ERL) project. These projects present a considerable challenge and an opportunity to participate in the design and fabrication of vacuum systems using innovative UHV and XHV concepts. LEPP maintains a well-equipped Vacuum Lab with a staff of trained vacuum technicians.

The responsibilities of the position include: research of materials, processes, and equipment instrumentation for the Cornell ERL; evaluation of new design concepts, surface preparation and treatment, and general assisting in improving accelerator performance; and further training of technicians. A PhD with experience in vacuum science is required. Experience with accelerator or other large vacuum systems is highly desirable.

Please send a cover letter including curriculum vitae and a publications list to Yulin Li, Newman Laboratory, Cornell University, Ithaca, NY 14853, and arrange for at least three letters of recommendation to be sent. Email correspondence may be directed to search@lepp.cornell.edu. Cornell is an equal opportunity/affirmative action employer. Women and minorities are encouraged to apply.

PhysicsJobs@physicsweb.org

Royal Holloway University of London

Research Assistants

Department of Physics

Two PPARC-funded postdoctoral Research Assistant positions are available from July 2004 to June 2007 to work within the Oxford/Royal Holloway Accelerator Science Institute as part of a concerted UK effort in accelerator R&D for the beam delivery system (BDS) of the future linear collider. These two posts are based at Royal Holloway, supervised by Professor Grahame Blair.

The first post is to work principally on hardware for the laser-wire project, where laser light is used to scan electron beams to determine their transverse size; this project is in association with international accelerator facilities. (Ref: KB/004196)

The second post is to work principally on determining the performance of BDS designs using advanced computation. This will involve simulating the important physics processes and optimising the BDS layout to minimise backgrounds in the detector. This work will form part of the core UK BDS effort for the international linear collider design studies. (Ref: KB/004197)

For both posts there may be some opportunity to teach at undergraduate or postgraduate level. Further details about the posts, the Institute and the work of the Royal Holloway Particle Physics Group can be found on our website at <http://www.pp.rhul.ac.uk>

Royal Holloway is one of the larger colleges of the University of London, situated on a pleasant campus about 25km west of Central London, close to the town of Windsor and Heathrow Airport.

Initial salary will be in the range £22,445 to £25,430 (pay award pending) including London Weighting, depending on experience.

Applicants should have a PhD (or be about to submit a thesis) in particle physics, accelerator physics or laser physics.

Informal enquiries about the posts can be made to g.blair@rhul.ac.uk

Further details and an application form are available from the Personnel Department, Royal Holloway, University of London, Egham, Surrey TW20 0EX; fax: 01784 473527; tel: 01784 414241; website: <http://www.rhul.ac.uk/Personnel/JobVacancies.htm>

Please quote the appropriate reference.

The closing date for the receipt of applications is Monday 14 June 2004.

We positively welcome applications from all sections of the community.

TWO COMPUTING POSTS FOR THE LHC EXPERIMENTS

The Particle Physics Department at the Rutherford Appleton Laboratory has two vacancies to work on the software for the ATLAS and CMS tracking detectors. These are fixed-term appointments for three years, starting immediately, and will suit applicants seeking to develop their expertise in the development of particle-physics software in a large international team.

Applicants must have a PhD in either experimental particle physics or "e-science" related to particle physics, or equivalent experience.

Further information about the ATLAS post can be obtained from Dr. Norman McCubbin on +44 (0)1235 446268, email: n.mccubbin@rl.ac.uk and at <http://www.cclrc.ac.uk/activity/section=5816> Further information about the CMS post can be obtained from Dr. Ian Tomalin on +44 (0) 1235 445046, email: i.tomalin@rl.ac.uk and at <http://www.cclrc.ac.uk/activity/section=5817>

The starting salary will be between £21,148 and £26,435 per annum (pay award pending) dependent on experience. An excellent index-linked pension scheme and generous leave allowance are also offered.

Application forms can be obtained from: HR Operations Group, Rutherford Appleton Laboratory, Chilton, Didcot, Oxfordshire, OX11 0QX. Telephone (01235) 445435 (answerphone) quoting reference VN2555/CC, or e-mail recruit@rl.ac.uk

All applications must be returned by 25 June 2004.

Interviews will be held during July 2004.

CCLRC is committed to Equal Opportunities.



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OF THE RESEARCH COUNCILS



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SCIENTIFIC STAFF POSITION

The Physics Department of Brookhaven National Laboratory (BNL) presently has an excellent opportunity available for a Scientist.

This position, under the direction of H. Gordon, requires a PhD., demonstrated leadership and innovation in collider physics analysis, at least 3 years experience beyond Ph.D. (more senior candidates will be considered), and knowledge of experimental high-energy physics. Experience with hadron collider analysis is preferred. The research will focus on the software development leading toward physics analysis of the ATLAS experiment. BNL has a leading role in ATLAS liquid argon calorimetry, the muon spectrometer, software and is the location of the U.S. Tier 1 computing facility. Will work with staff to develop the capability for physics analysis.

Interested candidates should submit a cover letter indicating research interests, a curriculum vitae and arrange to have three letters of recommendation sent to Dr. Howard Gordon,, Physics Department, Building 510A, Brookhaven National Laboratory, Upton, NY 11973-5000. BNL is an equal opportunity employer committed to workforce diversity.

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University of Heidelberg

The Faculty of Physics and Astronomy of the Ruprecht-Karls-University in Heidelberg invites applications for an

Associate Professor of Computer Science/Computer Engineering

The position is associated to the chair of computer science/computer engineering at the Kirchhoff-Institut for Physics (www.ti.uni-hd.de).

Possible research activities include parallel and distributed computer architectures and applications in natural science, in particular within the framework of existing interdisciplinary research in the physics field. We are seeking a person with proven, excellent qualification in computer science/computer engineering. For details please contact Prof. V. Lindenstruth (ti@kip.uni-heidelberg.de). The Kirchhoff-Institut for Physics offers a modern laboratory infrastructure, in particular including a very well equipped ASIC laboratory. Candidates should be prepared to participate actively in the teaching of computer science at all levels. The faculty explicitly encourages young scientists to apply.

The Federal State of Baden-Württemberg intends to transpose the Federal Professorial Remuneration Reform Law into state law on 1st January 2005. For an appointment from that date, the new W remuneration arrangements are hence expected to apply.

This is essentially a permanent position. The first contract will be based on regulation § 67 Abs. 1 UG and will be temporary. Exceptions to the temporal initial contract can be made under special circumstances and especially for applicants from outside Germany or outside academia if she/he would not consider the position otherwise. Should the position be made permanent after the initial period then this will not require a new application process.

The University of Heidelberg especially encourages women to apply for this position. Given equal qualification handicapped applicants are preferred.

Letters of application including a curriculum vitae, a list of publications and an outline of past and planned research should be sent in paper and electronic form to the **Dean of the Faculty of Physics and Astronomy of the University Heidelberg, Albert-Ueberle-Str. 11, D-69120 Heidelberg, Germany.**



The University of Sheffield

Department of Physics & Astronomy Chair in Experimental Particle Physics

Salary: By agreement

As an established experimental particle physicist of recognised international reputation the post-holder will be responsible for leading the existing Sheffield ATLAS group, building on our involvement in SCT and Inner Detector commissioning to take a prominent role in the exploitation of physics data. The post forms part of an ongoing initiative by the University to form a vigorous centre of excellence crossing Particle Physics and Particle Astrophysics. This has already led to the establishment of a new cross-discipline theory group (Prof. L. Roszkowski) and the rapid expansion of the neutralino Dark Matter group (Prof. N. Spooner). Benefiting from this environment the post-holder will be encouraged to build and lead new academic strength in particle physics, work for positions of national and international leadership within ATLAS and develop new technologies compatible with the team's priorities including under-pinning plans for the long-term future of the LHC programme.

Informal enquiries are welcome and should be directed to Prof. Neil Spooner (n.spooner@sheffield.ac.uk), tel +44 (0) 114 222 4422.

Closing Date: 1 July 2004 Ref. R3310

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For full post details/application pack visit:

www.sheffield.ac.uk/jobs or

email: jobs@sheffield.ac.uk

tel: 0114 222 1631 (24hr)

Please quote Ref. in all enquiries

INDEX TO DISPLAY ADVERTISERS

Amptek	46	Janis Research	42
Calder Industrial Materials	42	Mega Industries	9
CPI/EiMac	8	Microwave Amplifiers	26
Creative Electronics Systems	10	Milmega	16
Danfysik	4	Observatory Sciences	16
Diversified Technologies	14	Pearson Electronics	16
Electron Tubes	22	Physik Instrumente	30
Eljen Technology	34	Polymicro Technologies	46
F.u.G. Elektronik	22	QEI	21
Goodfellow	42	Saint-Gobain Crystals & Detectors	21
Hamamatsu Photonics	56	Scanditronix Magnet	30
Hitec Power Protection	26	VAT Vacuum Products	45, 43
I-Tronics	26	Vector Fields	22
Ideas	14	Wah Chang	12
Instrumentation Technologies	21	W.L. Gore	2
Integrated Engineering Software	38		

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