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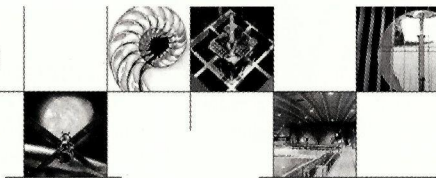
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PAUL SCHERRER INSTITUT

PSI



The Paul Scherrer Institut is a centre for multi-disciplinary research and one of the world's leading user laboratories. With its 1200 employees it belongs as an autonomous institution to the Swiss ETH domain and concentrates its activities on solid-state research and material sciences, elementary particle and astrophysics, energy and environmental research as well as on biology and medicine.

Since 1996, we are operating a novel proton therapy facility for cancer treatments with a very modern beam delivery technique through dynamic beam scanning. In the frame of the ongoing expansion of the facility we are installing a new dedicated superconducting cyclotron and a second next-generation proton gantry.

For the development of the control system of the new Gantry 2 we seek a

Software Engineer or a Physicist

Your tasks

- Collaboration in the development of the control system software for the dynamic delivery of the beam
- Outsourcing of components which can be delivered by industry
- Integration of the own developed software in a modular flexible system
- Perform adaptive work within a small team of experimental physicists

Your profile

- Software engineer or physicist with experience in integrating complex distributed systems in a research environment
- Good knowledge on system architecture, data flow, task intercommunication and graphical user interfaces
- Experience with data acquisition and real-time programming of control systems
- Acquainted with safety and quality assurance aspects of software
- Experience in outsourcing software developments
- Good knowledge of German and/or English

We are looking forward to your application.

Information on this project can be found at <http://p-therapie.web.psi.ch/proscan.html> and in Z. Med. Phys. 14 (2004) 25-34.

For further questions please contact Dr Eros Pedroni, Tel. +41 56 310 35 18.

Please send your application to: Paul Scherrer Institut, Human Resources, Mrs. Elke Baumann, ref. code 2104, 5232 Villigen PSI, Switzerland, e-mail: elke.baumann@psi.ch.

Further job opportunities: www.psi.ch

Deutsches Elektronen-Synchrotron Neutrino Astrophysics



DESY is one of the worldwide 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 neutrino astrophysics group of DESY assumes central responsibility for development, operation and data analysis of the neutrino telescopes at Antarctica. We have an immediate opening for our branch in Zeuthen for a position as a

Postdoc

Your field of work is the data analysis of the AMANDA and IceCube neutrino telescopes. You will participate in the construction of the IceCube experiment and you might have to work during antarctic summer months at the South Pole.

The job requires a university degree in physics with PhD. Knowledge of the analysis methods and the software frameworks of high-energy and astro-particle physics are prerequisites, as are experience in building and operating experiments. If you want to work in a team of committed physicists and technicians and have a good knowledge of English, please send your application and CV to our personnel department at the address below. For further information email Dr. Stefan Schlenstedt at stefan.schlenstedt@desy.de

The position is limited for two years with a possible one year extension.

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.

Deutsches Elektronen-Synchrotron DESY

member of the Helmholtz-Association

code: 40/2005 · Platanenallee 6 · D-15738 Zeuthen · Germany

Phone + +49 (0)33762/77240 · www-zeuthen.desy.de

email: personal.abteilung-zeuthen@desy.de

Deadline for applicants: 24.05.2005

UNIVERSITY of GLASGOW

DEPARTMENT OF PHYSICS AND ASTRONOMY

Research Associate in Detectors for Experimental Particle Physics

£27,116 – £35,883 or £34,227 – £42,573

You will provide support and development/direction for the hardware activities of the Experimental Particle Physics group. This will entail the management of the Laboratory facilities and people available to the group as well as ensuring that the hardware commitments of the group to the various experiments and projects are delivered. This post is available until September 2008 in the first instance.

For an application pack, please see our website at ppewww.ph.gla.ac.uk/ or write quoting Ref 11197/DPL/A3 to Prof D H Saxon, Faculty of Physical Sciences, Kelvin Building, University of Glasgow, Glasgow G12 8QQ.

Closing date: 27 May 2005.

The University is committed to equality of opportunity in employment.



www.gla.ac.uk



UNIVERSITY
of
GLASGOW



European
Gravitational
Observatory

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

EGO is recruiting:

- | | |
|---------------------------|----------------|
| - Software Engineer | Ref. OP/SW/02 |
| - Applied Physicist | Ref. OP/INT/01 |
| - Electronic Technician | Ref. OP/ET/01 |
| - Interferometer Operator | Ref. OP/OP/03 |

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

cerncourier.com

In the framework of its dynamic research policy and the additional opportunities offered by the Flemish Government through the "Bijzonder Onderzoeksfonds (Special Research Funds)", the University of Antwerp invites applications for the following **FULL-TIME** position at the Department of Physics of the Faculty of Science:

ACADEMIC STAFF MEMBER_{M/F}

in the field of Elementary Particle Physics

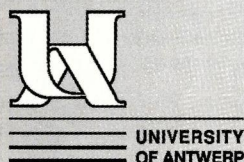
ASSIGNMENT: • the assignment consists of lecturing duties, scientific research and service to society • during the first period of (maximum) ten years, scientific research will be the main activity • the teaching duties are limited and involve courses on elementary particle physics • the applicant is expected to carry out experimental research in the field of elementary particle physics • he/she will have to participate actively in the activities of the research group, the department and the university.

REQUIREMENTS: • the successful applicant should have a Ph.D. in Physics • he/she has research qualities on a high level in the field of elementary particle physics and ample international experience • the applicant has to be familiar with experiments using high-energy particle accelerators and the corresponding data analysis techniques • good communication skills are considered an advantage.

The University of Antwerp offers an appointment as docent (level of lecturer) from October 1, 2005. A higher degree can be awarded, depending on the qualifications and work experience of the applicant. The appointment is initially for a period of three years, after which it can become tenured pending a favourable evaluation.

If you are interested, please fill out the mandatory application form (see <http://www.ua.ac.be/personeelsdienst> or call 03 265 31 54) and send it, together with a detailed research proposal, to the University of Antwerp, Campus Middelheim, department Personnel (cel AP), Middelheimlaan 1, 2020 Antwerpen, before June 4, 2005.

More information can be found on <http://www.ua.ac.be/personeelsdienst>



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is the perfect platform to promote a diverse range of events and important announcements, including: • calls for proposals/research papers • summer schools • workshops • courses • equipment sales.

In 2005 *CERN Courier* has introduced a special classified advertising rate to assist in your communication needs. *CERN Courier* offers you access to readers in the world's major physics research sites and the opportunity to run a modest advertisement at a low cost. Many organizers have appreciated how *CERN Courier* has helped to raise the profile of their events and significantly increased the number of delegates.

For further information and consultative advice on classified advertising in *CERN Courier* and the Web options that we offer, please contact

Yasmin Agilah.

Tel:

+44 (0)117 930 1196

E-mail:

yasmin.agilah@iop.org



Transnational Access to Research Infrastructures

The Integrated Initiative "HadronPhysics I3", financed by the European Commission and coordinated by the Istituto Nazionale di Fisica Nucleare, Laboratori Nazionali di Frascati, Italy, combines in a single contract several activities, Networking, Research Projects and Transnational Access. The Transnational Access activity involves 9 infrastructures among those operated by the participants in HadronPhysics I3. Its objective is to offer the opportunity for European research teams, performing or planning a research project at these infrastructures, to

APPLY FOR EC FUNDED ACCESS

to these infrastructures, to cover subsistence and travel expenses.

The only eligible teams (made of one or more researchers) are those that conduct their research activity in the EU Member States or in the Associated States. Information about the modalities of application and the **Calls for Proposals** can be obtained by visiting the web site of each infrastructure:

- A1. INFN-LNF, <http://www.lnf.infn.it/cee/tariffp6/>
- A2. DESY-HERMES, <http://www-hermes.desy.de/I3HP-TA-HERMES/>
- A3. FZJ-COSY, <http://www.fz-juelich.de/ikp/tmr-life.html>
- A4. FZJ-NIC/ZAM, <http://www.fz-juelich.de/nic/i3hp-nic-ta/>
- A5. GSI-SIS, http://www.gsi.de/informationen/users/EC-funding/I3/SIM_e.html
- A6. U Mainz-MAMI, <http://www.kph.uni-mainz.de/en/eu/>
- A7. ZIB, <http://www.zib.de/i3hp>
- A8. LU-MAXLAB, http://www2.maxlab.lu.se/members/proposal_nucl/index.html
- A9. UU-TSL, <http://www4.tsl.uu.se/tsl/tsl/infrastr.htm>

This announcement can also be found at the following URL: <http://www.infn.it/eu/i3hp>



Accelerator Physicists

TRIUMF, located in Vancouver, British Columbia, is Canada's national research facility for particle and nuclear physics. Currently we have two exciting employment opportunities available in our Isotope Separator Accelerator (ISAC) Division. ISAC at TRIUMF is a world leading facility for the production and acceleration of intense beams of exotic isotopes. These beams are used for fore-front experiments in nuclear astrophysics, nuclear structure and studies of fundamental symmetries and condensed matter.

SENIOR ACCELERATOR PHYSICIST - COMPETITION # 954

The person we seek will assume leadership for ISAC operations. The primary responsibilities will include: beam delivery to experiments, overseeing the commissioning of new beam initiatives, coordinating maintenance of the ISAC facility, and managing the ISAC operations personnel resources.

JUNIOR ACCELERATOR PHYSICIST - COMPETITION # 967

The person we seek will assist ISAC Operations in delivering ion beams to experimental stations, and will be involved in various functions related to beam quality control. Primary responsibilities will include developing algorithms and tools for transporting beam to experimental stations; quality assurance of the beam transport; development of effective tools, diagnostics and operating instructions; and the development and commissioning of new beam capabilities.

These positions are open to all qualified applicants, and in the case of equal qualifications, preference may be given to a Canadian Citizen or Permanent Resident. **Complete details for each of these competitions, including responsibilities, qualifications and application procedures can be found on our web site at: <http://www.triumf.info/> Click on employment opportunities.**

WE HIGHLIGHT SCIENCE

The European Synchrotron Radiation Facility (ESRF) is Europe's most powerful light source. It is located in the unique scientific environment of Grenoble, in the heart of the French Alps.

The ESRF offers you an exciting opportunity to work with international teams on a wide range of scientific subjects using synchrotron light: Physics and Chemistry, Life Sciences and Medicine, Earth and Environmental Sciences, Surface and Materials Sciences.



Scientists
Post-doctoral fellows
PhD students
Engineers
Technicians
Administrative staff

Have a look at our vacancies at: www.esrf.fr

Contact us at: recruitment@esrf.fr

MANCHESTER
1824

The University
of Manchester

www.manchester.ac.uk/vacancies

School of Physics and Astronomy

Post Doctoral Research Associate in Experimental Particle Physics Ref: EPS/105/05

Salary will be £21,640 p.a.

The University of Manchester invites applications for the post of Research Associate in the Particle Physics Group of the School of Physics and Astronomy. You will work on the ATLAS experiment, and be expected to spend some time based at CERN in Geneva.

The post will be available from 1 July 2005 (or as soon after this date as possible) for a period of up to three years.

The starting salary will be £21,640 per annum. If you are yet to be awarded your PhD you may initially be appointed as Research Assistant on Grade RAIB.

Informal enquiries may be made to Dr Fred Loebinger email: fred.loebinger@manchester.ac.uk or telephone +44 (0) 161 275 4180.

Application forms and further particulars are available at <http://www.manchester.ac.uk/vacancies> or from EPS HR Office, The University of Manchester, Sackville Street Building, Manchester, M60 1QD, Tel: 0161 275 8837, Fax: 0161 306 4037 or e-mail: Eps-hr@manchester.ac.uk.

Please quote reference. Closing date: 31 May 2005.

The University will actively foster a culture of inclusion and diversity and will seek to achieve true equality of opportunity for all members of its community.

Combining the strengths of UMIST and The Victoria University of Manchester



Three exciting new opportunities are available in key areas of the research programme of the High Energy Physics (HEP) group (<http://hep.ph.liv.ac.uk/>)

Senior Experimental Officer: Pixel Detectors

Salary from £22,507 pa

The appointment is for a physicist to take a leading role in the semiconductor pixel detector programme which is based on Monolithic Active Pixel Sensors (MAPS) and on CCD technologies for track and vertex detectors at future experiments. The MAPS work is funded by PPARC and by the RC-UK Basic Technology initiative in the Multidimensional Integrated Intelligent Imaging (M³) consortium. The CCD work is a PPARC initiative focused on the read-out requirements of the International Linear Collider (ILC) as part of the Linear Collider Flavour Identification Collaboration (LCFI). The facilities of the Liverpool Semiconductor Detector Centre (LSDC <http://hep.ph.liv.ac.uk/lscd/>) underpin all semiconductor detector R&D in Liverpool.

Candidates should hold a PhD in experimental particle physics, or allied research involving position-sensitive detectors. Familiarity with microelectronics characterisation, with sensors for radiation detection, and/or with the calibration, operation and data analysis of large array detectors in High Energy Physics experiments, would be a strong advantage. The post, based in the Department of Physics, is available immediately.

Quote Ref: B/479

Closing Date: 31 May 2005

Postdoctoral Physicist

Salary from £19,460 pa

The successful applicant will join the Liverpool research programme concerned with measurements of quark and lepton mixing and CP-violation. The group has an established reputation in this physics which continues with the BABAR experiment at SLAC (currently data-taking), with the LHCb experiment at CERN (under construction), and with preparation for the long base-line neutrino experiment T2K (the Japanese Nuclear and Particle Physics Facility, JPARC, Tokai to Kamiokande).

The successful applicant should have, or expect soon to have, a PhD in HEP. The position provides an attractive opportunity to take a leading role in the Liverpool initiative with other UK collaborators for the design and construction of a major aspect of the "280 meter detector" for T2K, while at the same time participating in work at BABAR. The post is available immediately, and will, in the first instance, be for a period of three years.

Quote Ref: B/477

Closing Date: 31 May 2005

Physicist/Engineer for IT Innovation, Development and Support

Salary from £22,507 pa

The successful applicant will take a leading role in the on-going development and enhancement of all aspects of its computing facilities. The group's computing infrastructure is based on major investment from government and industry in large parallel-processor arrays with LAN desktop and laptop pc access. With SRIF and industrial funding (DELL), the large pc array MAP2 (940 cpu, http://www.ph.liv.ac.uk/latest_news/news_09_06_03.html) has been installed and brought into operation. It is now the backbone of the group's computing infrastructure, both in-house and via GridPP (NorthGrid) and NWGrid. The opportunities to initiate and lead innovative developments, which facilitate and improve the group's scientific programme, are challenging and cutting-edge.

Candidates are anticipated with experience in high performance computing and/or system development, who have demonstrated innovation and originality in the exploitation of networking and computer systems. A PhD in experimental or computational particle physics would be advantageous for the immediate familiarity which it brings to the job concerning the needs, interests and requirements of HEP. The post, based in the Department of Physics, is available immediately.

Quote Ref: B/478

Closing Date: 31 May 2005

Informal enquiries to Prof. Phil Allport (B/479) on +44 151 794 3365 (allport@hep.ph.liv.ac.uk), Prof. Themis Bowcock (B/478) on +44 151 794 3360 (tjvb@hep.ph.liv.ac.uk), Dr Christos Touramanis (B/477) on +44 151 794 7767 (christos@hep.ph.liv.ac.uk), Dr Tim Greenshaw (B/479) on +44 151 794 3383 (green@hep.ph.liv.ac.uk), and Prof. John Dainton on +44 151 794 7769 (jbd@hep.ph.liv.ac.uk)

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

MANCHESTER
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The University
of Manchester

School of Physics and Astronomy

**Lectureship and Temporary Lectureship in
Experimental Particle Physics (2 posts)**

REF: EPS/092/05

Salary from £23,643 - £35,883 p.a.

The Particle Physics Group at the University of Manchester is seeking to appoint two Lecturers in Experimental Particle Physics. The group is active in several leading collaborations, experimental and theoretical particle physics activities are well integrated, and the computing facilities are excellent. The group is strong in detector physics, including the construction of hardware by staff in our workshops.

Candidates, who should have demonstrated excellence in Experimental Particle Physics research, will strengthen the group's ongoing programme, particularly our activity in ATLAS and in an experiment at the future Linear Collider.

The posts would also involve teaching in the School of Physics and Astronomy, which maintains a large student intake at both undergraduate and graduate levels.

One of these posts would be a permanent (tenured) appointment, the other for a fixed term of up to 5 years. Appointments will be made on the Lecturer B Scale, though the permanent appointment could be made at a more senior level for a suitable candidate. The posts would start on 1st October 2005, or as agreed.

Application forms and further particulars are available on our website or alternatively, please email your request to the Human Resources Office. Tel: 0161 2758837 e-mail: Eps-hr@manchester.ac.uk

Please quote reference. Closing date: 31 May 2005

The University will actively foster a culture of inclusion and diversity and will seek to achieve true equality of opportunity for all members of its community.

Combining the strengths of UMIST and The Victoria University of Manchester

www.manchester.ac.uk/vacancies

SENIOR MECHANICAL ENGINEER

TTM, a company belonging to the TELSTAR group and specialist in:

- Manufacturing of mechanical components for ultra high vacuum environments and cryogenic technologies
- Manufacturing and assembly of tooling and prototypes, machining and welding of parts as per drawing specifications for aerospace industry,

is seeking one Senior Mechanical Engineer for its Technical Office department in Valencia (SPAIN).

Main tasks to develop:

- Development of UHV components
- Project Management in house and on customer facilities
- Preparation of tenders
- Assistance to production in manufacturing processes

The characteristics of the candidates must be:

- Degree in mechanical engineering
- At least 5 years experience in development of UHV components in Research Centres or particles accelerators facilities
- Comprehensive knowledge of SS welding and machining processes
- Experience in Structural analysis and finite element technique
- Experience in 2D and 3D CAD environments
- Post-graduate courses valuable
- Residence in Valencia (SPAIN)
- Availability for travelling

Languages:

- English: Fluent
- French: Valuable fluent
- Spanish: Valuable (may be learnt in Spain)

Remuneration according to applicants' abilities and experience.

Please, send CV's with reference SME to:

TTM (TELSTAR TECNOLOGIA MECANICA S.L.)
e-mail: info@ttm.es
Tel. +34 96 151 95 91
Fax. +34 96 151 71 05
www.ttm.es
www.etelstar.com



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Universität Hamburg

The Institute for Experimental Physics of the Hamburg University invites applications for a

Postdoctoral Position (BAT 2a) in Accelerator Physics

to start July 1st, 2005. The position is limited to a duration of max. 3 years. The salary will be according to the German civil services BAT IIa. There are 40 working hours per week. The limited duration is in accordance with § 57b Hochschulrahmengesetz in its version from 27.12.2004. The opening and its duration depends on final approval of funding for the project "self-seeding at the VUV-FEL at DESY" by the funding agency.

The University of Hamburg is an equal opportunity/affirmative action employer and welcomes applications from qualified women. Equally qualified handicapped applicants will be given preference.

Duties:

The duties consist of scientific work in the project. Within the job framework there will be opportunity to conduct independent research, to gain scientific qualification and to collect teaching experience.

Job profile:

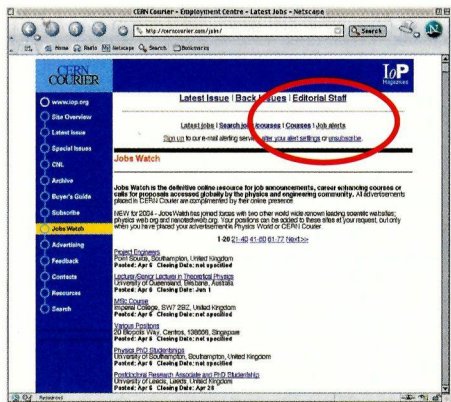
The accelerator physics group of the Institute for Experimental Physics plans to contribute to the Work Package "Seeding and Harmonic Generation", supported by the EU within the EUROFEL collaboration. The successful applicant will work on accelerator physics issues of the "free-electron laser self-seeding scheme" which will be installed in the VUV-FEL at DESY. This requires control of the electron position at the 10 Micrometer level in all three spatial dimensions. Most demanding will be the control of the longitudinal position (i.e. timing) of the electron bunch relative to the photon pulse. The work will include an analysis of sources and mechanisms for the relative jitter of both the electron beam and the photon beam and the development of a technique to stabilize the required overlap.

Candidates must hold a university degree and have a PhD in physics or electrical engineering.

Interested applicants should send a curriculum vitae, a list of publications, a brief statement of research interests and skills and names of three potential referees, **before May 22nd, 2005** to: Prof. Dr. Jörg Rossbach, Institut für Experimentalphysik, Luruper Chaussee 149, D-22761 Hamburg, Germany.

Please don't send originals. For further information please contact: joerg.rossbach@desy.de

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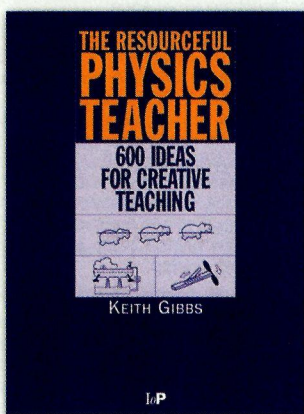
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