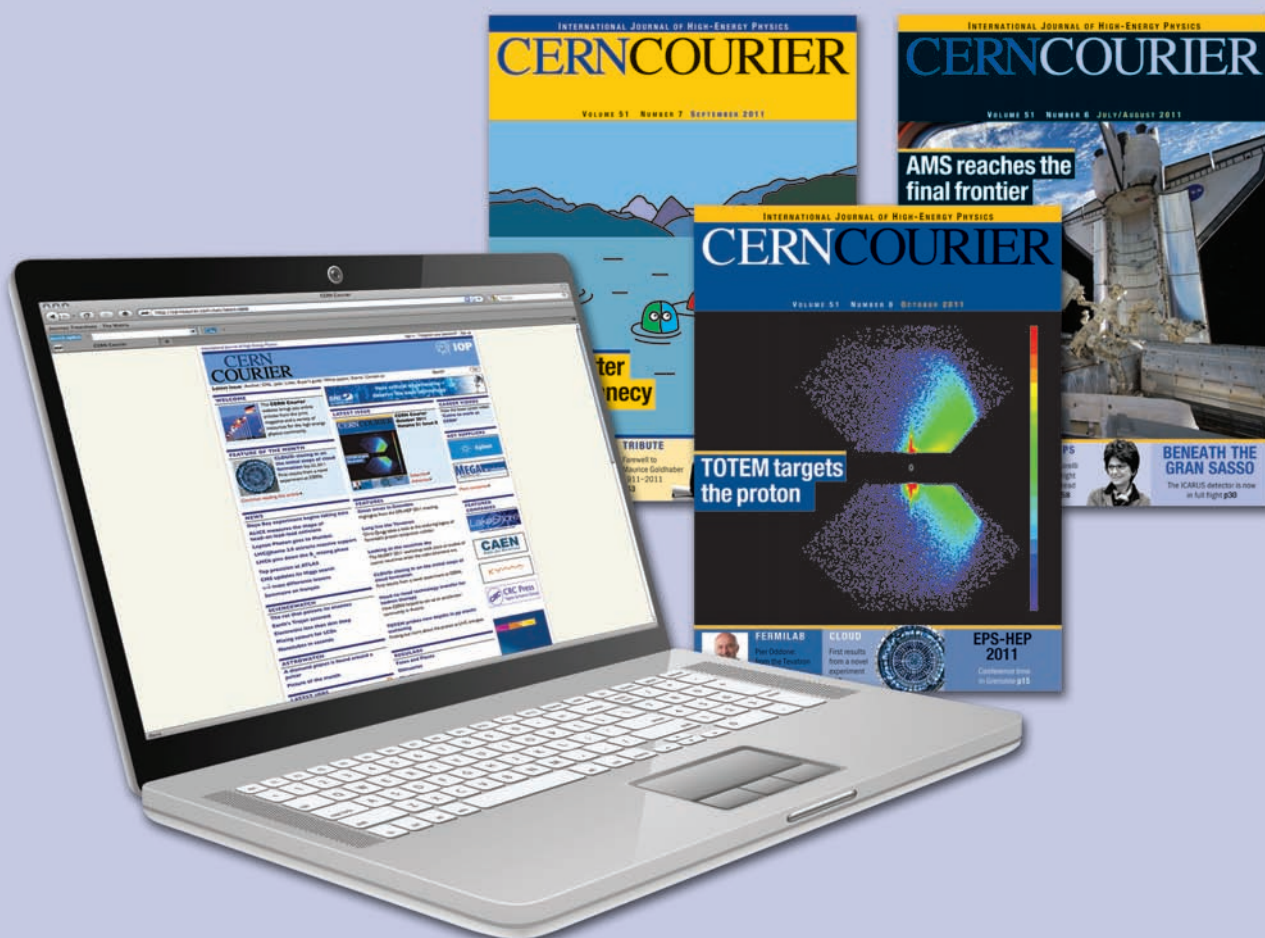


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RUPRECHT-KARLS-
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HEIDELBERG



The **Heidelberg Graduate School of Fundamental Physics (HGSFP)** at the Department of Physics and Astronomy at Heidelberg University, a school of the German Excellence Initiative, invites applications for

Doctoral Fellowships

in its core areas of modern fundamental physics: (a) Fundamental Interactions and Cosmology, (b) Astronomy and Cosmic Physics and (c) Quantum Dynamics and Complex Quantum Systems. Thesis research topics cover areas such as experimental and theoretical astrophysics, cosmology, accelerator based particle physics, precision measurements in physics, study of quantum systems – many body as well as small systems, low as well as high temperature physics, atomic, molecular and optical physics, mathematical physics and string theory. The HGSFP combines doctoral projects at the forefront of international research in the areas mentioned above with a rich and thorough teaching programme. Further information can be found on the School's web site: <http://www.fundamental-physics.uni-hd.de>.

The branch Astronomy & Cosmic Physics is the International Max Planck Research School (IMPRS) for Astronomy and Cosmic Physics at the University of Heidelberg (<http://www.mpia.de/imprs-hd>). Students accepted into the Graduate School will automatically be members of the IMPRS-HD and conversely. Membership in the IMPRS for Quantum Dynamics in Physics, Chemistry and Biology (<http://www.mpi-hd.mpg.de/imprs-qd>) as well as the IMPRS for Precision Tests of Fundamental Symmetries in Particle Physics, Nuclear Physics, Atomic Physics and Astroparticle Physics at the University of Heidelberg (www.mpi-hd.mpg.de/imprs-ptfs) is envisaged if appropriate.

Highly qualified and motivated national and international students are invited to apply. Applicants should hold a Master of Science or equivalent degree in physics. At equal level of qualification, preference will be given to disabled candidates. Female students are particularly encouraged to apply.

Applicants have to initiate their application registering via a web form available at <http://www.fundamental-physics.uni-hd.de/fellowships>. Applications should reach us by November 30, 2011.



UNIVERSITY of
ROCHESTER

Tenure Track Faculty Position in Experimental Particle Physics in the Department of Physics and Astronomy

The Department of Physics and Astronomy at the University of Rochester invites applications for a tenure-track faculty position in Experimental Particle Physics. With this position, we seek to broaden the research portfolio of our existing program, which includes research in hadron collider physics at CMS (LHC), CDF and D0, neutrino physics at MINERvA and T2K and quark flavor physics at CLEO and BES. We are particularly interested in considering candidates with a research interest in non-accelerator based particle physics or particle astrophysics, but will consider candidates across the spectrum of Experimental Particle Physics.

Applicants should have a Ph.D., an outstanding record of research, and a commitment to excellence in teaching at both the undergraduate and the graduate level. We seek applications from both junior and senior candidates and anticipate this to be a tenure-track or tenured appointment. Applications will be reviewed on an on-going basis. Each candidate should submit a letter of application, a curriculum vitae including a list of publications, a description of research and teaching plans and at least four letters of recommendation. To initiate an application please visit the following website.

www.rochester.edu/fort/pas

The University of Rochester has a strong commitment to diversity and actively encourages applications from candidates from groups underrepresented in higher education. The University of Rochester is an Equal Opportunity employer and encourages applicants from members of minority groups and women. All applications are considered without regard to race, sex, age, religion or national origin. Salary will be competitive.



The Abdus Salam
International Centre for Theoretical Physics

Condensed Matter and Statistical Physics Section (CMSP Section)
tel.: +39-040-2240540, fax: +39-040-22407540 or 224163, e-mail: cm@ictp.it
<http://www.ictp.it/pages/research/cmsp.html>

THEORETICAL CONDENSED MATTER AND STATISTICAL PHYSICS (CM&SP) POST-DOCTORAL POSITIONS AT THE ABDUS SALAM INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS (ICTP) TRIESTE, ITALY (ACADEMIC YEAR 2012-2013)

The current research areas of the ICTP CMSP Section include disordered quantum many-body systems, quantum Monte Carlo simulations of ultra-cold gases: BEC-BCS crossover in strongly interacting Fermi gases, low-dimensional and/or disordered Bose gases; physics of nano-devices; statistical physics of complex systems and interdisciplinary applications; random matrix theory and its applications; density functional theory based investigations of structural, electronic and optical properties of materials, in particular in the field of renewable energy storage and conversion; development of efficient algorithms for the computation of electronic excitations in nanoscale systems.

A limited number of post-doctoral positions for young CM&SP theoreticians will be available starting Fall 2012.

Appointments will be made for two years, with the possibility of renewal for one more year.

Applicants should be no more than 35 years of age at the time of application and should have obtained their Ph.D. after 2007. The application form can be accessed at the website: <https://onlineapps.ictp.it/ENTER/APPLICANT/CP11.mhtml>

Additional detailed CV, list of publications and at least three recommendation letters (sent separately after submission of application) must be all appended on-line.

Deadline for receipt of applications: 15th January 2012.





ELEKTA

Elekta is a human care company pioneering significant innovations and clinical solutions for treating cancer and brain disorders. The company develops sophisticated state of the art tools and treatment planning systems for radiation therapy and radiosurgery, as well as workflow enhancing software systems across the spectrum of cancer care.

We have a number of vacancies for **Physicists** to join our R&D Physics group in Crawley. The Physics group is responsible for providing support to the business and contribute with designs and measurements in the following areas: Physics of Radiotherapy Systems, including beam generation and dosimetry (electron beams, MV and kV photon beams), general Radiation Physics, Monte Carlo simulations and other computational modelling methods, Control Systems for experiments, Microwave components and theory, Waveguide testing and tuning, Optics, Physics of Detectors and Imaging Systems.

Successful applicants will take a leading role in supporting the development of new products and will be involved on a number of projects including both computational and experimental activities. Ideally candidates will have experience of medical accelerator systems and the ability to contribute in several of the areas that the Physics group is responsible for. Projects will often offer interaction with Research Hospitals and other Institutions, therefore exceptional written and spoken communication skills will be required. Our preference is for candidates to be educated to MSc or PhD level or equivalent. The ability to work to tight deadlines and within a successful team is also essential for these roles.

Current vacancies include:

- **Radiotherapy System Physicist:** You will take a leading role in designing, planning, implementing and managing test programmes in order to produce performance data for Elekta Linac systems. You will be involved in a variety of R&D projects. You will ideally have an MSc or a PhD degree in Medical Physics, Radiation Physics or closely related discipline and experience working within the Medical Devices industry or a Radiotherapy Hospital department (although experience as a Radiation Physicist in another area will be considered). Experience with international compliance standards and/or Physics QA programmes will be an advantage.

- **Accelerator Physicist:** You will provide the business with technical support of Elekta RF electron linear accelerators and associated developments, with particular focus on beam generation, transport, control and monitoring. This role will require an understanding of periodic accelerating structures, particle-in-cell modelling, electron sources, RF sources and electron beam dynamics. Ideal candidates will have a PhD degree in Physics, Accelerator Physics, Particle Beam Physics or closely related discipline. Candidates will have experience as an accelerator physicist, involved with modelling aspects of accelerating structures as well as beam experiments, either in a research or industrial environment. However applicants with less experience yet exceptional skills will also be considered.

- **Imaging Physicist:** The aim of this position is to provide physics support for the research and development of Elekta systems for Image Guided Radiotherapy. The Imaging Physicist contributes to the design and experimental evaluation of new developments of kV and MV imaging systems, define technical specifications and address issues related to acceptance, quality assurance and regulatory requirements. The role involves both computational and experimental tasks.

To be successful in this role a thorough understanding of the physics of X-ray imaging, X-ray sources and detectors is required. Candidates should have an MSc or preferably a PhD in Physics, Medical Physics, Radiation Physics, Medical Imaging or closely related discipline. Candidates will be expected to have experience as an X-ray Imaging Physicist, either in an industrial, research or clinical environment, having developed significant knowledge in several of the following areas: design and evaluation of planar or tomographic X-ray imaging systems, imaging detector electronics, image reconstruction algorithms, scatter correction methods, modelling of imaging systems, dosimetry of kV and MV photon beams.

To apply for these vacancies please visit our website www.elekta.com and apply via the careers section.

INDIANA UNIVERSITY FACULTY POSITION Accelerator and Beam Physics

The Department of Physics at Indiana University invites applications for a faculty position in accelerator and beam physics for appointment beginning Fall 2012. We are seeking to make this appointment at the tenured full professor level, however outstanding candidates at the assistant or associate professor level will be considered.

Scientists from all areas of accelerator physics are encouraged to apply. We seek an outstanding scientist who is interested in building a vibrant accelerator and beam physics research program that will complement and extend our ongoing efforts in accelerator design, nonlinear beam dynamics, development of beam manipulation and detection techniques, polarization preservation, and the development of novel instrumentation. We are particularly interested in scientists who may collaborate with the condensed matter and subatomic physics groups at the IU Center for the Exploration of Energy and Matter, which houses facilities such as a pulsed neutron source (LENS) and a compact electron storage ring (ALPHA). More information about the group may be found at <http://www.iub.edu/~iubphys/research/accelerator.shtml>

The successful candidate is also expected to demonstrate a commitment to excellence in teaching at both the undergraduate and graduate levels.

Applicants should submit a curriculum vitae, a statement of research plans, a description of teaching experience and philosophy, and contact information for six references to physrchr@indiana.edu or by mail to: **Faculty Search, Department of Physics, 727 E. 3rd St., Bloomington, IN, 47405-7105, USA.**

Applications received by January 1, 2012 will be given full consideration. Further information about the IU Physics Department can be found at <http://physics.indiana.edu>. Indiana University is an Affirmative Action, Equal Opportunity Employer committed to excellence through diversity. The University actively encourages applications of women, minorities, and persons with disabilities.



NATIONAL TAIWAN UNIVERSITY
**Leung Center for Cosmology
and Particle Astrophysics**

Distinguished Junior Fellowship

The Leung Center for Cosmology and Particle Astrophysics (LeCosPA) of National Taiwan University is pleased to announce the availability of several Post-Doctoral or Assistant Fellow positions in theoretical and experimental cosmology and particle astrophysics, depending on the seniority and qualification of the candidate. Candidates with exceeding qualification will be further offered as LeCosPA Distinguished Junior Fellows with competitive salary.

LeCosPA was founded in 2007 with the aspiration of contributing to cosmology and particle astrophysics in Asia and the world. Its theoretical studies include dark energy, dark matter, large-scale structure, cosmic neutrinos, and quantum gravity. The experimental investigations include the balloon-borne ANITA project in Antarctica and the ground-based ARA Observatory at South Pole in search of GZK neutrinos, and a satellite GRB telescope UFFO that will slew in to the burst event within 1sec.

These positions are available on August 1, 2012. Interested applicant should email his/her application with curriculum vitae, research statement, publication list and three letters of recommendation before December 1, 2011 to

Ms. Yen-Ling Lee ntulecospa@ntu.edu.tw

For more information about LeCosPA, please visit its website at <http://lecospa.ntu.edu.tw/>

Three letters of recommendation should be addressed to

Prof. Pisin Chen, Director

**Leung Center for Cosmology and Particle Astrophysics
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a place of mind

**The University of British Columbia
Department of Physics & Astronomy**

TIER II CANADA RESEARCH CHAIR

(Competition Fac-2011-05)

Applicants are urged to submit online applications at :

<http://www.physics.ubc.ca/cgi-bin/Jobs/Apply>

A CV, publications list, a statement of research interests, and a summary of teaching interests and experience are required.

Three letters of reference should be arranged to be directly submitted, preferably electronically, to jobs@phas.ubc.ca

The deadline for receipt of applications is November 25, 2011, with an expected start date of July 2012.

Information on the Department of Physics and Astronomy:

<http://www.physics.ubc.ca/>

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