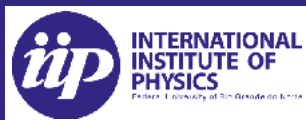


Recruitment

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POST-DOCTORAL POSITIONS AT THE INTERNATIONAL INSTITUTE OF PHYSICS

The International Institute of Physics of the Federal University of Rio Grande do Norte (IIP-UFRN) is opening new post-doctoral research positions.

Successful candidates should demonstrate a high level of expertise and a strong academic record in the areas of Foundations of Quantum Mechanics, Quantum Information, Statistical Field Theory and Engineering of Quantum Devices; Strongly Correlated Electronic Systems; Classical Gravity and Gravitational Wave Physics, String Theory and Mathematical Physics. A candidate's strong ability to conduct interdisciplinary research in those fields will be considered as an additional asset by the Selection Committee.

The appointments will start between October 2016 and March 2017 and have a two year's duration (extensible to two more years depending on agreement) with a tax-free monthly salary of R\$7.000,00 (seven thousand Brazilian Reals).

Candidates should send their CV with a list of publications, research proposal and at least two letters of reference (in English) to postdocpositions@iip.ufrn.br. Priority shall be given to applications received by October 1, 2016.

The IIP-UFRN is located in the city of Natal, the capital of the State of Rio Grande do Norte, in Northeastern Brazil.

The IIP-UFRN is a research institute with an international character, focused on theoretical research in frontier topics of physics. Intent on attaining a leading role in the region, the Institute promotes several visitor's, exchange, and workshop programs.

Quintessa Scientific Software Developer

Quintessa (www.quintessa.org) is an employee-owned company that undertakes high-quality scientifically-based consultancy, research and software development for industry and governments in the UK and around the world, primarily in the energy and environment sectors.

We are looking for a bright and enthusiastic graduate to join our team developing scientific software applications. The role will involve working on a range of software development projects, including web-based systems, data visualisation and modelling tools developed both internally and for our clients. Working in a small team of scientific developers, you will become competent in how different software applications are designed and developed, and in how they are used both within the company and by external clients.

Applicants are invited with a strong mathematical or numerate scientific background, and practical experience of software development, ideally in an object-oriented language such as C# or/and C++. Energy and environment domain knowledge is not required as full training will be provided. Practical experience of developing desktop and web-based software applications is not essential but would be an advantage, as would experience in languages such as PHP/SQL/HTML/Java.

We offer a competitive salary and benefits package and an excellent working environment. This permanent position will be based in our Henley-on-Thames office.

Please send a CV with a covering letter by e-mail to Richard Little at RichardLittle@quintessa.org.

LEADER OF RESEARCH PROGRAMME 2

X-ray sources driven by ultrashort laser pulses

The suitable candidate will be responsible for the delivery of X-ray sources driven by ultrashort laser pulses and their integration into the ELI Beamlines facility.

The candidates are expected to comply with the following requirements:

1. PhD in the field of laser plasma physics
2. Post-doc in laser driven X-ray sources would be a plus
3. Working experience of minimum 5 years in the field of laser driven X-ray sources with an excellent record of publications in this field in international peer-reviewed journals
4. Working experience in management of a larger research group
5. Willing to travel and English language on a very good level (written and spoken)

Location: ELI Beamlines, Institute of Physics ASCR, Dolní Břežany, Czech Republic

Applicants should provide their CV and cover letter (in English) along with a complete list of publications. They should single out 5 most important publications with the description of their contribution. All these materials should be sent to hr@eli-beams.eu. The deadline for applications is open.

Please include the following text in your cover letter, to allow us to process your personal details:

I agree that, according to the decree 101/2000 coll. (Czech Republic), my personal details sent to FZU AV CR, v.v.i., Na Slovance 2, 18221 Praha 8, Czech Republic can be used for the purpose of obtaining employment and management of database of employment candidates. This permission is given for the period of one year and can be at any time withdrawn by giving a notice in writing.



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The Institute for Nuclear Physics at the University of Münster invites applications for a tenured

Full Professorship in Experimental Physics (salary scale W3)

starting in October 2017.

Candidates are expected to have a strong track record in the field of heavy-ion physics.

The research programme should strengthen the current research activities of the Institute for Nuclear Physics (Involvement in the experiments ALICE/CERN and CBM/FAIR) as well as develop further the main research field Particle Physics. Detector development, well established in the institute should play an important role. Close cooperation is expected with the theoretical and experimental groups, especially within coordinated programmes like the existing graduate school "Strong and weak interactions – from hadrons to dark matter". Teaching obligations cover the whole area of Experimental Physics. Candidates are also expected to participate in the academic administration of the faculty.

Prerequisite for the application are a PhD and outstanding teaching skills, as well as academic achievements made as a Juniorprofessor (assistant professor), in a Habilitation (postdoctoral qualification), as a member of the academic staff of a university or non-university research institute, or in a research position in business, administration or other relevant fields in Germany or abroad.

The University of Münster is an equal opportunity employer and is committed to increasing the proportion of senior women academics. Consequently, we actively encourage applications by women. Female candidates with equivalent qualifications and academic achievements will be preferentially considered within the framework of the legal possibilities. We also welcome applications from candidates with severe disabilities. Disabled candidates with equivalent qualifications will be preferentially considered.

Applications with a CV, including teaching experience and publication list, copies of degree certificates, and a statement of research interests, shall be submitted in written form until **November 14, 2016** to the

Dean of the Faculty of Physics
Wilhelm-Klemm-Str. 9
48149 Münster, Germany

www.uni-muenster.de



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

DOCTORAL FELLOWSHIPS

in the following areas of modern fundamental physics: (a) Astronomy and Cosmic Physics, (b) Quantum Dynamics and Complex Quantum Systems, (c) Fundamental Interactions and Cosmology, (d) Complex Classical Systems, (e) Mathematical Physics, and (f) Environmental Physics. 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. In addition, fundamental problems in biophysics, e.g. in materials science aspects of cell biology, and in environmental physics are studied. 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.mpi.de/imprs-hd>). Students accepted into the Graduate School will automatically be members of the IMPRS-HD and conversely. Admission to the IMPRS for Precision Tests of Fundamental Symmetries (www.mpi-hd.mpg.de/imprs-ptfs), to the IMPRS for Quantum Dynamics in Physics, Chemistry and Biology (<http://www.mpi-hd.mpg.de/imprs-qd>), to the RTG Particle Physics Beyond the Standard Model (http://www.thphys.uni-heidelberg.de/~gk_ppbsm) or the RTG HighRR (High Resolution and High Rate Detectors in Nuclear and Particle Physics) is also possible. The IMPRS and RTGs offer doctoral positions and fellowships as well, and are combined efforts of Heidelberg University with the Max Planck Institutes for Astronomy and Nuclear Physics, which form an integral part of the exciting and broad research environment in Heidelberg.

Highly qualified and motivated national and international students are invited to apply. Applicants should preferably hold a Master of Science or equivalent degree in physics. Excellent candidates holding a four year bachelor degree and proof of research experience may also be considered. 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 be completed by November 22, 2016.

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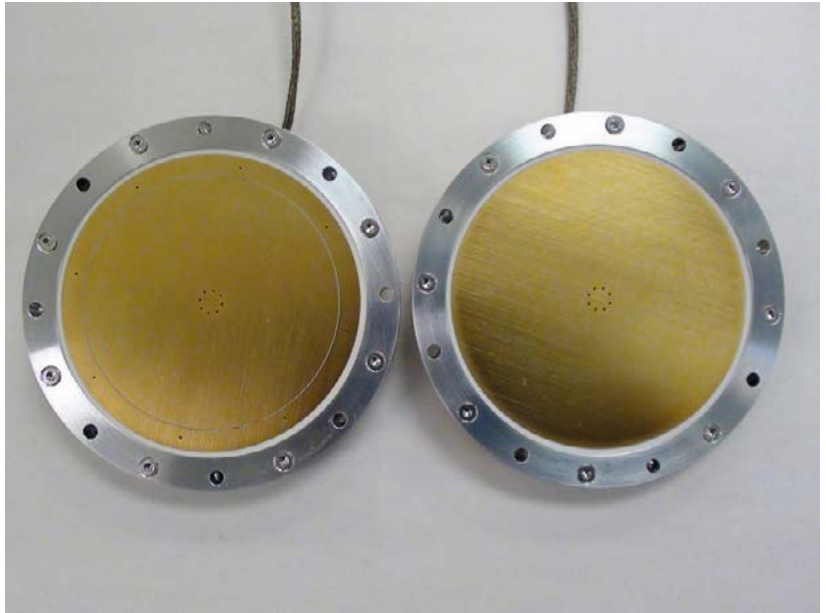
Queensgate Instruments, an Elektron Technology brand, specialize in creating nanopositioning and sensing solutions for high-tech industries, with variants for precision measurement in vacuum, radiation and cryogenic environments. The company was founded in 1978 as a spin-off from Imperial College, London, and pioneered the use of capacitive metrology for nanopositioning. With deep roots in academia, Queensgate has stayed firmly involved in cutting-edge research and development, and has a range of market-leading products.

The Nanosensor® is a non-contact measuring system based on the principle of capacitance micrometry. Two nanosensor plates (the probe and target) are mounted facing each other. The nominal gap is usually equivalent to the measurement range and the sensors operate from 50% nominal to 150% nominal. One plate is usually secured to a fixed position and the other moves. Short-range sensors generally offer the best resolution, with less than 10 pm possible for a 20 µm range. Longer range sensors of 11 mm can still offer high resolutions of a few tens of nanometres.

Our standard range of capacitive sensors, the NX series, are metal plate sensors. The standard models are constructed in aluminium, with the option of Super Invar for superior thermal stability. They are available in a variety of shapes and sizes to suit the application.



Image: NX capacitive sensor.



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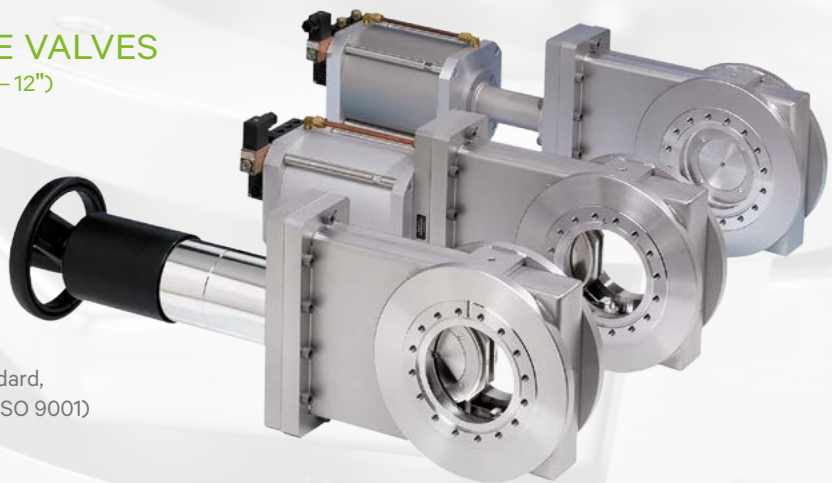
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