



Facility for Antiproton and Ion Research



Helmholtzzentrum für Schwerionenforschung GmbH

GSI Helmholtzzentrum für Schwerionenforschung operates a unique large-scale accelerator for ions. Researchers from around the world use this facility for experiments which help them make fascinating discoveries concerning the building blocks of matter and the evolution of the universe. In addition, they continually develop novel applications in medicine and technology. In the coming years the new international accelerator facility FAIR (Facility for Antiproton and Ion Research), one of the largest research projects worldwide, will be built at GSI.

The department of „Superconducting Magnet Technology and Testing“ is responsible for the development, construction and testing of the superconducting magnets for the future FAIR accelerator facilities. – This Department is looking for a

## Head of Superconducting Magnet Technology and Testing

Indicator: 6300-17.40

For detailed information concerning tasks and profile of qualifications please refer to: [www.gsi.de](http://www.gsi.de), „[jobs/career](http://www.gsi.de/jobs/career)“.

We are offering an interesting and varied professional activity in an international reputable research institute. We offer an indefinite contract. Salary is equivalent to that for public employees as specified in the collective agreement for public employees (TVöD Bund).

Further information about FAIR and GSI is available at [www.gsi.de](http://www.gsi.de) and [www.fair-center.eu](http://www.fair-center.eu).

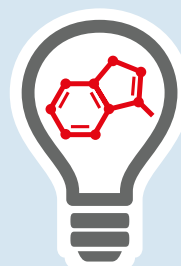
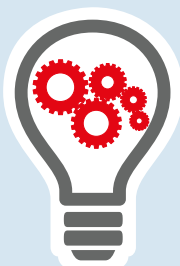
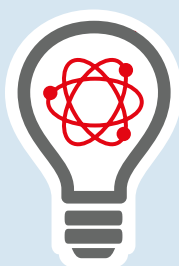
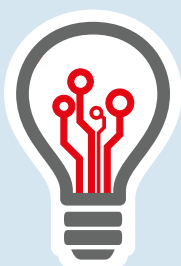
GSI supports the vocational development of women. Therefore women are especially encouraged to apply for the position.

Severely disabled applicants will be given preference to other applicants with equal qualifications.

Please send your complete application including the usual documents, your salary expectation and the above Posting ID by June 30<sup>th</sup> 2017 to:

**GSI Helmholtzzentrum für Schwerionenforschung GmbH**  
**Abteilung Personal**  
**Planckstrasse 1**  
**64291 Darmstadt · Germany**  
 or by E-Mail to: [bewerbung@gsi.de](mailto:bewerbung@gsi.de)

# brightrecruits.com



The jobs site for physics and engineering

## Physicist in Experimental Particle Physics Research

Apply now for this opportunity to join CERN's Experimental Physics Department. Functions will include:

- Taking a leading role in all aspects of particle physics experiments, involving the conception and design of experiments, the building and operation of detectors and the analysis of data.
- Co-ordinating or making important contributions to studies, projects or committee work.
- Representing the Organization at conferences, workshops, or in other research laboratories and institutions.
- Supervising research and development work and to plan and manage activities including material and human resources.

Full details of the position and details of how to apply can be found on <http://cern.ch/go/9qGF>. Deadline 19th June 2017.



Jefferson Science Associates

Thomas Jefferson National Accelerator Facility

### Associate Director for Accelerator Operations, Research and Development

Jefferson Lab is a world-leading nuclear physics facility funded by the U.S. Department of Energy's Office of Science. The Lab is devoted to the study of the building blocks of matter that make up 98 percent of the visible universe.

Jefferson Lab seeks an internationally renowned accelerator physicist with extensive research management experience for the position of Associate Director for Accelerator Operations, Research and Development. The successful candidate will have strong leadership and management capabilities with the demonstrated ability to direct a world class R&D organization.

#### The Associate Director is responsible for:

- Establish strategy and direction for the laboratory's accelerator technology capabilities in alignment with the Lab strategic plans to ensure that the Lab is well-positioned to achieve research goals and contribute to future national and international accelerator projects.
- All aspects of the safe operation, maintenance and improvement of the accelerator complex.
- The execution of the accelerator research and development program, including the operation of test facilities.
- The successful delivery of project scope within cost and schedule.
- Support the Lab in achieving a diverse and inclusive work environment.

Responsibilities include the management of the Accelerator Division of approximately 165 staff including 85 scientists and engineers. The Division operates the 12 GeV Continuous Electron Beam Accelerator Facility in support of the experimental nuclear physics program and user community, numbering more than 1500 scientists.

For more information and prompt consideration, visit our website at [www.jlab.org/careers](http://www.jlab.org/careers). To receive full consideration, please apply by June 30, 2017. Confidential inquiries and questions concerning this search may be directed to **Stuart Henderson, Jefferson Lab Director**, at [stuart@jlab.org](mailto:stuart@jlab.org), or **Rhonda Barbosa, Human Resources Director**, at [rbarbosa@jlab.org](mailto:rbarbosa@jlab.org).

Thomas Jefferson National Accelerator Facility (Jefferson Lab) is an Equal Opportunity Employer and does not discriminate in hiring or employment on the basis of race, color, religion, ethnicity, sex, sexual orientation, gender identity, national origin, ancestry, age, disability or veteran status or on any other basis prohibited by federal, state, or local law. As part of the Lab's equal employment opportunity policy, we also take affirmative action as called for by applicable laws and Executive Orders to ensure that minority group individuals, females, disabled veterans, recently separated veterans, other protected veterans, Armed Forces, and qualified disabled persons are introduced into our workforce and considered for promotional opportunities.



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## careers

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**Northern Illinois University**

## OPPORTUNITY FOR TENURE-TRACK ASSOCIATE and ASSISTANT PROFESSORSHIP APPOINTMENTS IN ACCELERATOR PHYSICS (JOINTLY WITH FERMILAB)

The Physics Department of Northern Illinois University is home to world-class faculty in accelerator, detector and particle physics. In a joint initiative with Fermi National Accelerator Laboratory (Fermilab), it has established a Cluster of Research Excellence in accelerator science and beam physics since 2014. Faculty members have national and international research and educational collaborations with Fermilab, Argonne National Laboratory (ANL), SLAC, CERN, DESY and USPAS/ CERN Accelerator Schools. Funded by the National Science Foundation, the Department of Energy and other institutional and national agencies, the Accelerator and Beam Physics faculty members in the cluster work at the theoretical and experimental frontiers, with full access to special purpose laboratories and advanced accelerator test facilities at NIU and Fermilab (e.g. NIU High Brightness Electron Source laboratory in IARC and Fermilab FAST/IOTA testbed). The research cluster aims at enabling "discovery-class" science driven by charged particle beams and associated advanced techniques/ technologies of lasers, bright electron and ion sources, nano-material structures, superconductivity, microwave cavity electrodynamics, nonlinear dynamics, electrodynamic and optical control of intense charged particle, atomic and molecular beams. The R&D is directed towards developments in particle physics and related disciplines of cosmology, material and life sciences and their applications to societal grand challenges of energy, environment, health and security.

Working seamlessly with the outstanding accelerator and technology research staff at Fermilab and Northern Illinois Centre for Accelerator and Detector Development (NICADD), unique collaborative research opportunities exist to contribute to large scale national and international accelerator activities such as the PIP-II at Fermilab for the development of the long-baseline neutrino facility in support of the international DUNE experiment, TeV-scale collider developments world-wide including the LHC and its upgrade and the FCC at CERN, "precision" experiments e.g. "g-2", "Mu-2-e" etc. at Fermilab, anti-matter related experiments at CERN, as well as cutting edge innovative research in laboratory –scale experiments to investigate the "dark" sector of the vacuum.

**The cluster seeks appointment of two tenure-track faculty members in accelerator physics, jointly with Fermilab, at Associate/Assistant Professor levels as soon as possible. Aspiring candidates, with a PhD degree in Physics or equivalent and relevant post-doctoral experience beyond, should contact Professor Swapan Chattopadhyay, President's Professor and Director of Accelerator Research, NIU (schaterji@niu.edu) and Distinguished Scientist, Director's Senior Leadership Team, Fermilab (swapan@fnal.gov) for further details and send early expressions of interest and professional background information in advance before August 15, 2017. Candidates from historically underrepresented communities are especially encouraged to apply. A detailed job posting with specific directions for applications will be announced online and selected journals soon.**

## Chair for Experimental nuclear and particle physics at Vilnius University, Lithuania

Vilnius University is seeking an excellent scientist to fill a leading position in the Faculty of Physics. The successful candidate is expected to build a research team to carry out studies in the field of experimental particle physics, and establish a strong connection to CERN. She/he is also expected to work in close collaboration with other research groups at Vilnius University, with the aim to increase the level of cooperation between Lithuania and other international scientific and academic institutions, and with particular attention to Lithuania-CERN cooperation.

Vilnius University has joined CERN RD collaborations in 2002 and the CMS experiment in 2007. Previous participation in one of the major experiments at the Large Hadron Collider at CERN (ALICE, ATLAS, CMS or LHCb) will be considered an advantage.

Vilnius University is the oldest and most comprehensive university in Lithuania. According to "QS World University Rankings 2016-2017", it is among top 500 universities in the world. The academic staff consists of 1350 employees (250 of them are professors) and around 20,000 students, including 3,600 graduate and 900 doctoral students.

The research laboratories of the Faculty of Physics have premises in the National Centre of Physical and Technological Sciences in Sunrise Valley ("Saulėtekis") since 2016. The Valley is the largest and most advanced base for physical, chemical and life sciences and for technology in Lithuania and the Baltic states. The lecture rooms and the educational laboratories at the Faculty of Physics, the largest center of physics studies in Lithuania, are situated nearby.

A Chair position is equivalent to a full professor position. The incumbent is expected to fulfill the requirements corresponding to the recommended European competences for a leading (R4) or, at least, an established (R3) researcher.

Candidates must have been trained at international particle physics laboratories and leading national collaborating institutions, with expertise in modern experimental particle physics. They must demonstrate a proven record in securing significant research funding/budgets/resources and experience in managing and leading research projects.

Applications are invited from candidates of any nationality and gender. Citizens of non-EU countries will need to fulfil the requirements for obtaining a work permit in Lithuania. The successful candidate must take residence in Vilnius.

**Chair's mission:** • Coordinate Lithuania's research activities in theoretical and experimental high energy physics, and in materials and computer sciences and medical applications relevant to CERN research fields; • facilitate the involvement of researchers at Vilnius University into the programmes and experiments conducted at CERN; • organize teaching and training of students and young researchers in particle physics, particle detector techniques, data processing and related fields; • raise the public awareness for fundamental physics such as the current understanding of the Universe and its origin in a form that is suitable for a broad audience.

**Full details of the Chair's duties will be provided upon request.**

**The successful candidate will be entitled to:** • a separate office; • premises to establish her/his own laboratory, if the existing infrastructure does not match the needs, within the limits of the Centre's financial possibilities; • Salary Range: negotiable and depending on experience.

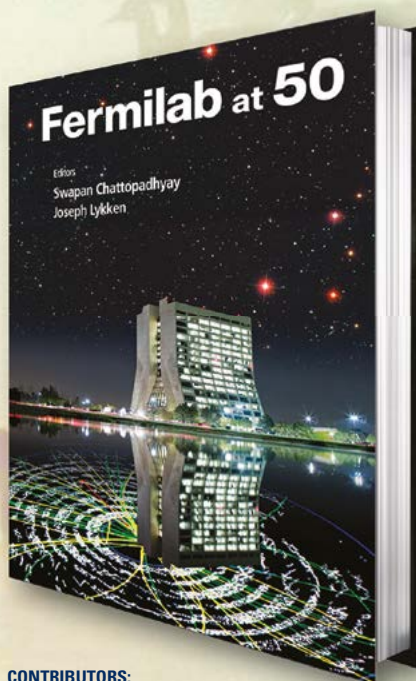
The applications should be sent to VU Directorate of Personnel [zis@cr.vu.lt](mailto:zis@cr.vu.lt) **The deadline: 10 September, 2017.**

A cover letter should include a request to participate in the contest and should be addressed to the Rector of Vilnius University.

Also, a description of academic activities together with a list of scientific publications, curriculum vitae, an outline of the research plan and any other additional documents allowing to objectively evaluate the qualifications of the applicant.

The letters of support from senior scientists with an established track record in high-energy nuclear and particle physics (min 3, max 6) should be sent directly to Vilnius university ([zis@cr.vu.lt](mailto:zis@cr.vu.lt)).





**CONTRIBUTORS:**

**T. D. Lee** (Nobel Laureate, Columbia University, Emeritus)  
**Art McDonald** (Nobel Laureate, Queens University/SNOLAB)  
**Burton Richter** (Nobel Laureate, Director Emeritus, SLAC)  
**Nigel Smith** (Director, SNOLAB)  
**Jack Steinberger** (Nobel Laureate, CERN, Emeritus)  
**Ed Witten** (Princeton University)  
**Mike Witherell** (Director, Berkeley Lab)  
**Lyndon Evans** (Director, Linear Collider Collaboration, CERN)  
**Fabiola Gianotti** (Director-General, CERN)  
**Yifang Wang** (Director, IHEP, China)  
**James Siegrist** (Director, DOE OHEP)  
**Mike Turner** (Director, KICP, U. Chicago)  
**Sau Lan Wu** (University of Wisconsin, Madison)  
 and many others.

**About the editors**



**Swapan Chattopadhyay** is a Distinguished Scientist in the Senior Leadership of Fermilab and President's Professor for Research, Scholarship and Artistry and Director of Accelerator Research at Northern Illinois University. Chattopadhyay received his Ph.D. from University of California at Berkeley which started his association with Fermilab and CERN proton-antiproton colliders in search of the W and Z bosons and the top quark. Since then Chattopadhyay has held major scientific leadership positions in the USA and UK at Berkeley Lab, Jefferson Lab and Cockcroft Institute. Recognized internationally for pioneering contributions to particle accelerators and colliders, he has contributed to the US and European particle physics strategies. He is a Fellow of the APS, AAAS, IoP (UK), RSA (UK), a visiting professor at Oxford and honorary scientific associate at CERN.



**Joe Lykken** is the Deputy Director for Research and Chief Research Officer at Fermilab. A Distinguished Scientist at the laboratory, Lykken received his Ph.D. from the Massachusetts Institute of Technology, and has previously worked for the Santa Cruz Institute for Particle Physics and the University of Chicago. He is known for theoretical research in a variety of areas including supersymmetry, superstrings, and extra dimensions, applying his research to the Large Hadron Collider at CERN as a member of the CMS collaboration, including the characterization of the properties of the newly discovered Higgs boson. He is a Fellow of the APS and AAAS.

**In this commemorative volume, scientific leaders from around the world celebrate Fermilab's 50<sup>th</sup> anniversary with thoughts on the laboratory's past, present and future.**

*"In the last 50 years, Fermilab has been true to this legacy that continues to inspire, shape and enrich the lives of countless young scientists resulting in such world-class fundamental discoveries as the bottom quark, the top quark and the tau neutrino."*

— **T. D. Lee, Nobel Laureate**

*"Congratulations to Fermilab on 50 years of service and leadership to the particle physics community...in collaborations for experiments in underground laboratories such as SNOLAB. Fermilab scientists are an integral part of the SNOLAB community...we look forward to many years of great science."*

— **A. McDonald, Nobel Laureate and N. Smith, SNOLAB Director**

*"On the occasion of Fermilab's 50th birthday I am happy to offer my congratulations on the lab's past successes and best wishes for its future. There has been much technical and scientific collaboration between Fermilab and SLAC over the last 50 years."*

— **Burton Richter, Nobel Laureate**

*"Enrico Fermi is one of the greatest physicists of all time whom I have personally known and worked with. Fermilab should be very proud of being named after Fermi. It is a major laboratory of particle physics...my best wishes...on its 50<sup>th</sup> anniversary."*

— **J. Steinberger, Nobel Laureate**

*"What an amazing half century of discovery this has been! Neutral currents, high energy neutrino interactions, jets, bottom quarks, top quarks, tau neutrinos, tests of quantum chromodynamics and the full Standard Model – Fermilab has played a central role in an epochal period. There is much to be proud of as we look back, and hopefully the next half century will be just as eventful."*

— **Ed Witten, Princeton University**



300pp Oct 2017

978-981-3227-45-3

US\$58

£51

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