

Recruitment

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PLEASE CONTACT US FOR INFORMATION ABOUT RATES, COLOUR OPTIONS, PUBLICATION DATES AND DEADLINES.



People Fellowship at Fermilab

The Peoples Fellowship at Fermilab seeks applications from newly minted Ph.D.s. (degree conferred within the past three years) in the following disciplines: Accelerator Physics; Accelerator-Related Technology; Particle Physics and Cosmology or related field. Post-doctoral experience is not required but may be advantageous for candidates applying from the field of particle physics and cosmology or a related field.

The Fellowship is awarded on a competitive basis and is designed to attract outstanding entry-level accelerator physicists, specialists in accelerator technologies, and high energy physics post-doctoral researchers with demonstrated leadership potential who wish to embark on a new career in accelerator physics or technology.

This exciting opportunity offers extraordinary latitude in research activities selection. Current areas of research that are of interest at FNAL include (but are not limited to): single particle and collective nonlinear dynamics of intense beams, microwave/optical stochastic and electron cooling of phase-space, high intensity proton beams, high intensity neutrino sources, high-field superconducting magnets, superconducting radio-frequency science and technology, high luminosity and high energy 1-100 TeV class future colliders for leptons and hadrons, novel accelerator concepts, accelerator controls and feedback, and computational physics, simulations and modeling.

The Peoples Fellowship provides an attractive salary and benefits package competitive with a university assistant professorship. The appointment term for candidates with less than two years post-doc experience is an initial four year appointment eligible to be considered for a second three-year term. For candidates with two or more years of post-doc experience, the term is an initial three year appointment, eligible to be considered for a second two-year term.

Qualifications and Essential Job Functions

- Ph.D. within the last three years in accelerator physics or accelerator-related technology or particle physics and cosmology or a related field
- Demonstrated ability to carry out independent research
- Demonstrated leadership potential

- Excellent oral and written communication skills as demonstrated by presentations at conferences and a strong record of publications in professional journals

Respect, understand and value the individual differences that embody the principles of diversity.

Abide by all environmental, safety and health regulations.

Physical Activity and Work Requirements

Human Factors: Prolonged Computer Work, Visually Demanding, Tight Work Schedules, Confined Spaces

- Ability to travel by automobile and/or commercial air carrier both domestically and internationally may be required
- Ability and a willingness to work in underground experimental areas may be required

To be considered for this exceptional opportunity, candidates must submit a cover letter with statement of interest, an online CV, three (3) letters of reference, and a list of publications.

The application deadline is June 30, 2015.

Questions may be submitted via email to peoplesfellowship@fnal.gov and/or swapan@fnal.gov. Attention: Prof. Swapan Chattopadhyay, Chair, Peoples Fellowship Committee

There is no legal requirement that Fermilab sponsor an employee for U.S. permanent residence. As a result, Fermilab will make the decision to sponsor an employee on a case-by-case basis. Fermilab will consider the following factors, among others, when determining whether to sponsor an employee for U.S. permanent residence: performance, length of service, long-term need for the position, and cost.

Diverse People, Diverse Jobs

Fermilab is an Equal Opportunity Employer.

Minorities/Women/Disabled/Veterans are encouraged to apply.

(Deputy) Director of the RHIC/US ATLAS Computing Facility at



The RHIC Computing Facility and the US ATLAS Tier 1 Center are co-located and co-operated in the Physics Department at Brookhaven National Laboratory. This joint facility is responsible for supplying computing support to the RHIC experiments at BNL and to US participation in the ATLAS experiment at the CERN LHC.

The Physics Department is seeking an outstanding scientist to become the Director of the RHIC/U.S. ATLAS Computing Facility in 2017 after a year or so serving as Deputy Director starting about January 1, 2016.

Required Knowledge, Skills and Abilities:

- Ph.D. in experimental physics, computer science or related field.
- At least ten years or more prior experience as a leader in the field of scientific computing.
- A good track record and demonstrated organizational, managerial and leadership skills in the context of a major scientific/technical project.
- Excellent oral and written communication and interpersonal skills.
- Experience preferred in project planning and execution, and in budget and resource management.

To be considered for this position and see the full job description, please apply online at External Positions (www.bnl.gov/hr/careers/jobs/index.php?q=3) and enter Job ID number 298 into the Search by Job ID field.



Thinking about the Future of Basic Science.

Group Leaders at the Center for Axion and Precision Physics Research

The Center for Axion and Precision Physics Research (CAPP) of the Institute for Basic Science (IBS) in Korea invites applications and nominations for senior Group Leaders in the areas of experimental physics of axion dark matter, low noise RF electronics, and storage ring electric dipole moments.

The candidates internationally recognized for their research excellence and scholarship will join this international research center modeled after the German Max-Planck Institutes. Group Leaders are expected to focus on research, are not allowed to submit proposals for outside funding, and will be both tenured with IBS, as well as tenure track or tenured full professors at KAIST (Korea Advanced Institute of Science and Technology), a renowned Korean university. Professors at KAIST are required to teach 1 course per semester, no Korean language skills are expected.

Applications will be accepted until the positions are filled. Nominations for this position are also encouraged. For more information about the CAPP and its goals, as well as how to apply, see capp.ibs.re.kr.

Nominations and questions should be addressed to the director of the center, **Professor Yannis K. Semertzidis**, at yannis@ibs.re.kr.



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2 PhD Scholarships, Silicon Quantum Computation and Atomic Electronics

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We seek outstanding and enthusiastic PhD candidates to work (1) in multi-qubit silicon-based quantum computation with ESR control and (2) to develop and electrically characterize a novel quantum integrated circuit chip based on atomically precise three dimensional architectures. Candidates will learn the latest techniques in our internationally unique atomic manipulation program in how to make and measure devices with atomic-scale precision using low noise, high frequency electrical measurements at cryogenic temperatures.

Applications close: 30 June 2015 or until position filled

Contact: Professor Michelle Simmons,
Email: michelle.simmons@unsw.edu.au



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The DFG Research Training Group

Strong and Weak Interactions - from Hadrons to Dark Matter

invites applications for

PhD positions (TV-L E13, 75%, up to 3 years)

to start on **July 1, 2015 or later**.

The structure of the newly founded Research Training Group (Graduiertenkolleg) is based on joint education and research of theorists and experimentalists in nuclear, particle and astroparticle physics as well as computer scientists and mathematicians.

In strong interactions we aim at precision in experiments and theoretical predictions. Examples are the transition from the quark gluon plasma into bound hadrons, the parton distributions in cold nuclear matter or properties of mesons. In weak interactions we investigate more speculative questions beyond the Standard Model, especially those related to dark matter and neutrinos.

Applicants with a very good master's degree or diploma in physics are expected to submit the usual application documents (curriculum vitae, copies of transcripts and certificates) as well as two letters of reference and a letter explaining their motivation to join our research training group and their research interests.

The University of Münster is an equal opportunity employer and is committed to increasing the proportion of 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 should be sent by **June 30, 2015** to the spokesperson of the Research Training Group preferentially by e-mail: Prof. Dr. Christian Weinheimer, Institut für Kernphysik, Wilhelm-Klemm-Str. 9, D-48149 Münster e-mail: weinheimer@uni-muenster.de

brightrecruits.com



The jobs site for physics and engineering



Senior and Junior Researchers, Postdoctoral research assistants,
PhD students, Engineers, Physicists and Technicians at

Extreme Light Infrastructure – Nuclear Physics (ELI-NP)



Extreme Light Infrastructure – Nuclear Physics (ELI-NP) will be a new Center for Scientific Research to be built by the National Institute of Physics and Nuclear Engineering (IFIN-HH) in Bucharest-Magurele, Romania.

ELI-NP is a complex facility which will host two state-of-the-art machines of high performances:

- A very high intensity laser beams from two 10 PW lasers;
- A very intense, brilliant γ beam, very low bandwidth, with $E_\gamma > 19$ MeV, which is obtained by incoherent Compton back scattering of a laser light off an intense electron beam ($E_e > 700$ MeV) produced by a warm linac.

IFIN-HH - ELI-NP is organizing competitions for filling the following positions:

Senior and Junior Researchers, Postdoctoral research assistants, PhD students, Engineers/Physicists (particle accelerators, mechanics, optics), Engineers (physics, laser, electronic, electrical, electrotechnical, instrumentation and control) and Technicians.

The jobs description, the Candidate's profiles and the Rules of Procedures of Selection can be found at <http://www.eli-np.ro/jobs.php>.

The applications shall be accompanied by the documents required in the Rules and Procedures of Selection for these positions

The applications shall be sent to the Human Resources Department at human.resources@eli-np.ro.



**INTERNATIONAL
INSTITUTE OF
PHYSICS**
Federal University of Rio Grande do Norte
Natal, Brazil

The International Institute of Physics (IIP) invites applications for up to 4 (four) tenure-track Professor positions in any area of Theoretical Physics.

Currently, the gross annual salary for these positions is BRL 226.599,62.

Interested applicants must submit the following information by August 14, 2015:

- Research plan
- List of publications
- Curriculum vitae (including, in particular, date of birth, year and institution of PhD, title of thesis and name of supervisor)

The candidate is required to have at least five years of experience after his doctoral degree.

Each candidate should also indicate the names and e-mail addresses of not less than 3 renowned physicists. These physicists will receive an e-mail message from us with instructions on how to submit a recommendation letter on the candidate's behalf.

The decisions will be announced in October 2015 and the selected candidates are expected to start their activities at IIP between January 1st and February 1st, although a different arrangement can also be agreed upon.

For submission and further enquiries, please contact tenure-track@iip.ufrn.br or access our web page www.iip.ufrn.br.

UNIVERSITY OF BIRMINGHAM



MSc Physics and Technology of Nuclear Reactors

This one year MSc programme is open to graduates of any physical science, engineering or mathematical discipline wishing to go into the nuclear industry. Integrated labs and tutorials each week bring together a wide range of topics and provide examples and guidance in person.

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www.birmingham.ac.uk/msc-physics-nuclear-reactors



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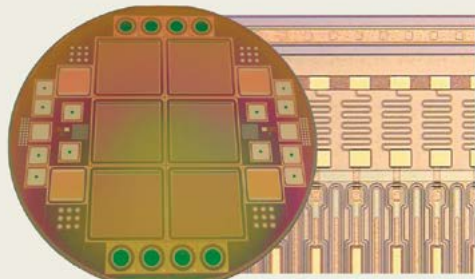


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Congratulations to CERN on Sixty Years at the forefront of High Energy Physics !

High Energy Physics has changed a lot in the last 60 years
and CERN has been there at every step along the way.

High energy physics instrumentation has changed too. Remember what it was like in the fifties? Let me remind you. Vacuum tubes! By the sixties we had transistors, but also Nixie tube scalars. We had custom electronics, designed and built in the lab. There were a few commercial systems available but with incompatible hardware and incompatible signal levels. Interfacing to a computer was new, and came with more custom electronics and tangles of cables. Data acquisition usually meant lots of film (Polaroids too, for the logbook!)

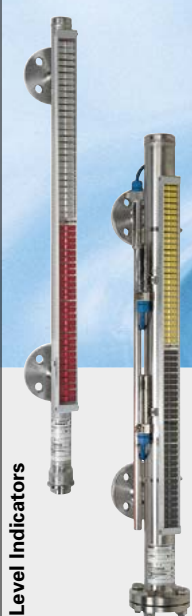
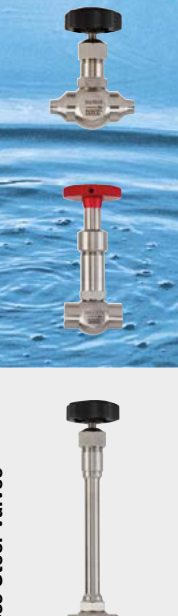
The NIM modular instrumentation standard was introduced in 1964, when CERN was 10 years old. NIM helped a lot with signal conditioning and trigger logic but not with data acquisition. NIM is still widely used today with only minor changes in the standard over the last 50 years.

Computer interfacing came next, in 1968 when CERN was still young, but already making its mark on physics. CERN was part of the international committee that designed CAMAC (Can Arrange Meeting Any Country). The ESONE report was issued in 1969 and CAMAC took off, rapidly becoming the dominant instrumentation standard in high-energy physics. CERN embraced it eagerly. Many different companies and laboratories designed and built crates and modules and they were all compatible!

CAMAC has been revised and improved several times over the years, most recently in 1998 (FASTCAMAC). While other standards have come and gone, CAMAC is still used in many particle physics applications. It is the easiest system to design modules for and to use. The data acquisition speed is not the fastest but is competitive for many applications, such as test setups and small scale experiments where ease of use is more important than speed. CAMAC is found in and used in laboratories and universities around the world.

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24 Halley Drive, Pomona, New York 10970
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