



# The Hispanic Physicist

The Newsletter of the National Society of Hispanic Physicists

Year 20

May 8, 2016



## Edward A. Bouchet Award

### Pablo Laguna Receives the Bouchet award

Pablo Laguna, from Georgia Institute of Technology, received the prestigious award at the APS April meeting in Salt Lake City last April 17. The citation

reads *"For contributions to numerical relativity and astrophysics; in particular, on the simulation of colliding black holes."*



Pablo Laguna received his degree in physics from the Universidad Autonoma Metropolitana at Iztapalapa in 1981 and his Ph.D. in physics from the University of Texas at Austin in 1987. In 1992 he joined the Pennsylvania State University, was promoted to associate professor in 1998 and to professor in 2000. He was named associate director of both the Center for Gravitational Wave Physics and the Institute for Gravitational Physics and Geometry in 2001. In 2008, he became professor in the Schools of Physics and of Computational Science and Engineering at the Georgia Institute of Technology. Laguna is founding member and first director of the Center for Relativistic Astrophysics at Georgia Tech until 2013 when he became chair of the School of Physics. His research is in computational astrophysics, investigating astrophysical phenomena involving binary systems with black holes and/or neutron stars. Laguna was named fellow of the American Physical Society in 2008 and elected to the Mexican Academy of Science in 2007.

### NSHP Congratulates Pablo!



### 2016 Victor Blanco Fermilab-NSHP Fellow

NSHP is happy to announce that Israel Chavarria was chosen to be the 2016 Victor Blanco Fermilab - NSHP Fellow. Israel is an undergraduate physics major from UTEP currently involved in radon gas prospecting in the Franklin Mountains of El Paso. He is scheduled to report for duties at Fermilab late this month.



### NSHP Congratulates Israel!

### Invited Talks on Race and Physics at Summer AAPT Conference

#### Session: Addressing Race & Ethnicity

- Understanding the Relationship Between Physics and Racial Identity for Black Students by Simone Hyater-Adams, Noah Finkelstein, Claudia Fracchiolla, Kathleen Hinko
- Creating Counter-Space: Deliberate Strategies Faculty Can Use to Create Environments Where Women of Color Thrive by Angela Johnson, Apriel Hodari
- Obstacles to Writing about Race: Lessons from Mathematics Education Research by Amy Parks
- Gender and Race in PER: Beyond the Binary and Reconsidering Our Past by Ramon Barthelemy



**Post- Graduate or Graduate Student Research Assistant:  
Applied Tunable Diode Laser Absorption Spectroscopy**



Through the Oak Ridge Institute for Science and Education (ORISE), this posting seeks a post-graduate or graduate student research assistant for a position applying tunable diode laser absorption spectroscopy (TDLAS) to the measurement of gases produced in a high pressure bioreactor at NETL who has completed coursework in physical science or engineering, and has experimental experience with TDLAS. For more information, please visit <http://www.ornl.gov/netl>



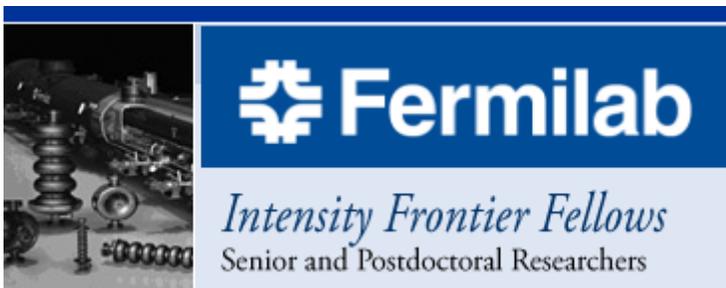
**THE UNIVERSITY  
of EDINBURGH**

**Early-Stage Researcher- Nuclear Astrophysics**

We have an opening for an Early-Stage Researcher position to work towards a PhD degree in the field of experimental nuclear astrophysics. The successful candidate will enrol in a PhD programme at the School of Physics and Astronomy of the University of Edinburgh. The post forms part of a wider ERC Starting grant project DoRES (Direct measurements of key nuclear Reactions for the creation of Elements in Stars). This is a high-profile position that offers exceptional benefits, and is ideally suited for top graduates with physics based degrees. The post is based in the Nuclear Physics group in the School of Physics and Astronomy at the University of Edinburgh. Experiments will be performed at world-leading international accelerator facilities, aimed at understanding the astrophysical origins of the chemical elements in our cosmos. The post is available to start in autumn 2016 for 42 months. Successful applicants will have or will be about to obtain a good quality degree qualification or masters in a physics based subject. The successful candidate will be capable of showing initiative and will be comfortable working within an international collaboration. Some prior experience in experimental nuclear (astro)physics and programming is advantageous, but not essential.

Your application should include a cover letter, a CV, and details of two referees that can be approached. Please also note the entry requirements for enrolling in a PhD programme in Nuclear Physics at the University of Edinburgh: <http://www.ed.ac.uk/studying/postgraduate/degrees/index.php?r=site/view&id=192>

Informal enquiries about this position should be made to Dr Claudia Lederer ([claudia.lederer@ed.ac.uk](mailto:claudia.lederer@ed.ac.uk)). The closing date for applications is 24-May-2016. Apply online at [www.jobs.ed.ac.uk](http://www.jobs.ed.ac.uk) using vacancy reference 036176.



Fermilab offers Intensity Frontier Fellowships to outstanding researchers in the areas of neutrino physics, muon physics, and other topics in the Intensity Frontier. Fellows will receive funding to allow enhanced participation in Fermilab experimental and data analysis efforts, in relevant areas of particle physics theory, or in future projects. The fellowships provide the ability for

researchers to spend significant time at Fermilab, with the goal of expanding and sustaining an intellectual center of excellence within the laboratory.

We seek researchers with a doctorate in particle or nuclear physics who will use the resources available at Fermilab to make a major contribution to the Intensity Frontier in the areas of physics analysis of experiments, development of relevant particle physics theory, or development of future projects. The fellowship provides an outstanding opportunity for young scientists to develop an independent research program.

Successful candidates will ordinarily be resident at Fermilab for 50 percent or more of the duration of the fellowship.

- Term: 6 months to 1 year, starting no earlier than September 1, 2016.
- During the requested award period, candidates must be employed by a U.S. or non-U.S. institution. Retirees and Fermilab employees are not eligible.
- Renewable to maximum of 2 years, with new proposal.
- Financial support: up to 50 percent of researcher's total current compensation, with remainder from researcher's home institution. Award levels are made consistent with available funding.
- Awards may include a travel budget to enable regular trips to remote experimental locations when appropriate, and to conferences to present work.
- A financial plan and travel plan must be included in the application.

More program details: [http://www.fnal.gov/pub/forphysicists/fellowships/intensity\\_frontier/index.html](http://www.fnal.gov/pub/forphysicists/fellowships/intensity_frontier/index.html)

Applications should be submitted through Academic Jobs Online, with a deadline of 05/20/2016.

<https://academicjobsonline.org/ajo/jobs/7232>



### Staff scientist in experimental nuclear physics

The *Laboratoire d'Étude du Noyau Atomique*, (LENA) for the study of the atomic nucleus is opening a staff scientist position for a physicist in the field of experimental nuclear physics, with a focus on spectroscopic studies of the heaviest nuclei.

LENA is part of the Nuclear Physics Division (SPhN) of the Institute for the study of the fundamental laws of the Universe (IRFU) located at CEA-Saclay. IRFU is a highly dynamic scientific environment including also research divisions on particle physics and astrophysics, as well as very strong technical and engineering divisions with top-level skills in instrumentation, cryogenics and accelerator technology. It benefits from several fully equipped on-site workshops. The successful candidate will work in a team composed of twelve permanent staff physicists working in the field of low-energy nuclear structure physics, covering four main areas: exotic nuclei, shapes of the nuclei, very- and superheavy elements, and fundamental nuclear theory.

The candidate is expected to have a PhD in nuclear physics and preferably several years of postdoctoral experience. She/He will show an outstanding record in experimental nuclear physics and will have excellent skills in nuclear spectroscopy. She/He should also have a good knowledge of the associated instrumentation: spectrometers and separators, particle and gamma detectors. She/He should show a high capability to work in international teams and be willing to take initiatives.

The application will be composed of a curriculum vitae, a letter of motivation (3-4 pages) including the candidate's research project, a list of publications, talks in conferences and seminars, the jury reports on their PhD manuscript and/or PhD defense, and 2-3 letters of recommendation, directly sent to the address below

**Complete applications should be sent in pdf format at the latest on the 20th of May 2016 to: [danielle.coret@cea.fr](mailto:danielle.coret@cea.fr)**

A local committee will establish the list of candidates selected for an interview at the beginning of June. The interviews are foreseen on the 20-22nd of June. For further information about the LENA laboratory, contact [antoine.drouart@cea.fr](mailto:antoine.drouart@cea.fr)

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### Brazil - U.S. Exchange Program

APS is now accepting proposals from Ph.D. students, postdocs, and professors at U.S. institutions for its exchange program in Brazil. **For Professors** This program funds physicists to visit Brazil to teach a short course or deliver a lecture series. **For Students & Postdocs** This program provides opportunities for physics Ph.D. students and postdocs to travel to Brazil to explore a variety of opportunities, such as attending a short course or summer institute, visiting a professor, or working in a lab. **The deadline to apply is Friday, June 3.**



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### APS Bridge Program Project Manager

The [American Physical Society \(APS\)](#), the premier membership association for physicists, seeks a dynamic and personable science professional to fill the position of APS Bridge Program Project Manager based at APS Headquarters in College Park, MD (near DC Metro College Park Station, Green Line). The Project Manager will provide national leadership in developing, organizing, and implementing elements of the APS Bridge Program (APS-BP) that has a goal of increasing the number of underrepresented minorities receiving doctoral degrees in physics.



#### Responsibilities include:

- Managing day-to-day activities of the project including setting agendas
- Managing a student application process, tracking budgets, and supporting and monitoring activities of universities that enroll bridge students
- Writing and editing written materials for the project; developing, vetting, and improving policies governing the APS-BP
- Developing and fostering relationships with students and faculty at all types of institutions
- Organizing national meetings to help education leaders understand and reduce barriers faced by underrepresented minority students in pursuing doctoral education in physics
- Becoming familiar with the literature concerning barriers that limit participation in graduate programs
- Providing guidance to students who are seeking to explore graduate education in physics; and collecting and analyzing data to help develop an understanding and provide recommendations to improve practices in the physics community

#### Qualifications:

- Graduate degree required (PhD preferred); bachelor's degree (or higher degree) in natural sciences or engineering required
- Experience with issues faced by underrepresented minorities in natural sciences or engineering; knowledge of effective practices in supporting minority students desired
- Ability to read and synthesize relevant literature is needed
- Ability to travel is important
- Excellent inter-personal skills and written and verbal communication skills are required
- Experience with program administration desired

To apply, send cover letter with salary requirement, resume and a list of your professional references to the attention of the Director of Human Resources via e-mail: [personnel@aps.org](mailto:personnel@aps.org).

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### CREIGHTON UNIVERSITY - ASSISTANT PROFESSOR IN PHYSICS

Creighton, a Jesuit university committed to excellence in the liberal arts tradition, has been consistently rated as the top Master's university in the Midwest. Creighton is located in downtown Omaha, a vibrant community of 900,000. The Physics Department offers both Bachelors and Masters degrees. We have an opening for a one-year position at the rank of Resident Assistant Professor beginning in August 2016. We seek a candidate with effective communication skills who will join us in our commitment to outstanding teaching and the tradition of involving undergraduate students in our research programs. A Ph.D. in physics or engineering is required. More information about our department and this position can be found at <http://physicsweb.creighton.edu>.



The initial application includes a cover letter, a current curriculum vitae, a statement of teaching philosophy consistent with the tradition of Jesuit liberal arts education, and names and contact information for three professional references. Initial applications must be submitted electronically at <https://careers.creighton.edu>.

Applicants who advance beyond the initial selection process will be asked to provide the following additional documents directly to the Physics department: undergraduate and graduate transcripts, letters of recommendation from the candidate's three references, and evidence of successful teaching (if available). These materials must be provided within one week of being requested for full consideration, so applicants may wish to ask references to have letters prepared prior to notification. Initial submission of these documents may be electronic, but original copies will be required prior to an offer of employment.

Applications will be accepted until the position is filled, but review of applications will begin April 18. Creighton is an EO/AA Employer: M/F/Disabled/Vet and seeks a wide range of applicants for this position in support of one of our core values—gender, ethnic and cultural diversity.

Questions regarding the position may be directed to the chair of the search committee, Dr. David Sidebottom, at [sidebottom@creighton.edu](mailto:sidebottom@creighton.edu) or 402-280-2935.

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**The Hispanic Physicist.** Published whenever there is news and the Editor has enough time. Send news, letters, congratulations, etc. to Jorge A. Lopez, [jorgelopez@utep.edu](mailto:jorgelopez@utep.edu). <http://www.hispanicphysicists.org/>.