Results of the NSHP Election

From left to right: President: Jesus Pando, President-Elect: Ramon Lopez, Treasurer: Edmundo Garcia, Secretary: Ximena Cid, Undergraduate Student Rep: Adrian Avila-Alvarez, Education Officer: Juan Burciaga, and At Large (Technical Officer): Mario Borunda. Other Board members are Luz Martinez-Miranda (Past president), Dave Ernst (SURA appointed) and Jorge Lopez (Communication Officer).

Congratulations and condolences!

Please nominate NSHP members to APS Nomination Committee

The APS Nominating Committee recommends candidates for the various APS awards. In its call for nominations for this (and other) committees, APS is seeking to attract candidates from underrepresented groups. NSHP would also like to see the pool of candidates for these awards diversify. To that end, NSHP is encouraging candidates to submit nominations for the Nominating Committee to the APS (https://docs.google.com/a/aps.org/forms/d/1aR3DkJtPJu8dCOzDcQgD2FGC_K82PsDjIGaQFW-r-XM/viewform). Candidates can also seek support for their nomination from the NSHP board. The NSHP board will evaluate and endorse candidates to the APS. Our hope is that candidates with an NSHP endorsement will stand a better chance of being selected to the committee. Those seeking endorsement from NSHP should send their names to Jesús Pando (jpando@depaul.edu). Other APS positions open for nominations are Vice President, General Councilor, International Councilor, Chair of Nominating Committee, Members of Nominating Committee, Vice Chair and Members of Panel on Public Affairs.
Jaime Fernandez-Baca Named APS Fellow

Jaime Fernandez-Baca from Oak Ridge National Laboratory was elected Fellow of the American Physical Society. Fernandez-Baca, a distinguished research staff member in the Quantum Condensed Matter Division in ORNL's Neutron Science Directorate, was recognized by the APS Division of Materials Physics "for seminal neutron scattering studies of magnetic materials, especially the spin and lattice dynamics of colossal magnetoresistive manganites." Fernandez-Baca's research is performed mainly at ORNL's High Flux Isotope Reactor, where he is the lead for the Triple Axis Spectroscopy group. His expertise is in the study of the magnetic ordering and spin dynamics of complex oxides and related alloys using neutron scattering techniques. He was the recipient of the International Atomic Energy Agency fellowship, the DOE Office of Science Outstanding Mentor Award (2008) and the Neutron Scattering Society of America Distinguished Service Award (2014). Fernandez-Baca is also a joint faculty professor in the department of physics and astronomy at the University of Tennessee. He earned his doctorate at the University of Maryland-College Park. Fernandez Baca will be formally recognized at the APS's March meeting. Congratulations Jaime!

Victor M Blanco Summer Research Fellowships

The Victor M Blanco Fellowships were established by the National Society of Hispanic Physicists to encourage Hispanic students to pursue a degree in physics and astronomy. The program is a partnership between the Laser Interferometer Gravitational Wave Observatory (LIGO), the Fermi National Laboratory (Fermilab), and the Department of Physics and Astronomy at Vanderbilt University. Each of these offers Victor Blanco Fellowships to students to participate in a summer research experience for undergraduate students.

The Fellowships are named after Victor M Blanco, a distinguished Puerto Rican astronomer. After serving in the Army in World War II, Blanco returned to the U. Chicago to complete his Bachelor's degree. He earned his PhD in Astronomy from the U. California, Berkeley, in 1949. He served as Director of the Astronomy and Astrophysics Program at the US Naval Observatory. An open cluster which he discovered while at Case Western Reserve U. was named “Blanco I”. In 1969 he became Director of the Cerro Tololo Inter-American Observatory (CTIO) in Chile. While the Director, 1969-1981, he led the laboratory in an expansion program that added six additional telescopes. In 1985, an asteroid was named after him, 9550 Victorblanco. The largest of the telescopes, a 4 meter, is named "Blanco IV".
NSHP is happy to announce a partnership with Fermi lab’s Summer Internship in Science and Technology (SIST) program. Fermilab is America's premier particle physics laboratory, collaborating with scientists from around the world, pioneering research is performed through world-leading particle accelerators and experiments, and developing technologies for science in support of U.S. industry.

The program is open to undergraduate students majoring in Physics, Electrical Engineering, Mechanical Engineering and Computer Science. NSHP student members applying for this program should apply through the SIST web site, http://eddata.fnal.gov/lasso/sist/apply.lasso. Important, students should enter the statement, “I am applying for SIST-Victor Blanco/NSHP fellowship program at FermiLab” in the Work Experience box on the application. The deadline to apply is January 31, 2016.

Victor Blanco/LIGO Summer Research Program

The Laser Interferometer Gravitational Wave Detector (LIGO) laboratories – www.ligo.caltech.edu – and associated universities have partnered with the National Society of Hispanic Physicists (NSHP) to offer the Victor M Blanco Undergraduate Summer Research Fellowship. LIGO is a large interdisciplinary laboratory that is the world leader in the search for gravitational waves. The Fellows will participate in the LIGO SURF program the larger Caltech summer research experience for undergraduates program: http://labcit.ligo.caltech.edu/LIGO_web/students/SURF/. NSHP and LIGO will work to provide an experience in forefront science/engineering research with a friendly and supportive atmosphere. LIGO is interdisciplinary and seeks science (physics, astronomy, math, and chemistry) majors and engineering (electrical, mechanical, chemical, computer) majors. Students interested in applying for the Fellowship need only apply to the SURF fellowship. Deadline is February 1, 2016.

Victor Blanco/Vanderbilt University Summer Research Program

The Department of Physics and Astronomy at Vanderbilt University runs a summer Research Experience for Undergraduates Program supported by the NSF which offers a Victor M. Blanco Summer Research Fellowship in cooperation with the National Society of Hispanic Physicists (NSHP). The program runs for 10 weeks starting on May 30 and is designed for rising sophomores, juniors, or seniors, but does accept freshmen and high school students. The students will work with a faculty mentor(s) on a funded forefront research project in the areas of astrophysics (observational and theoretical), biological physics (experimental), condensed matter, atomic, molecular, optical and nanoscale physics (experimental and theoretical), particle physics (LHC) and nuclear physics (RHIC and structure), and particle (theoretical/computational) physics. Students receive a stipend of $5,000, housing, meals, and transportation to and from Nashville. In addition, the Blanco Fellow will receive full support to attend the 2016 SACNAS National Conference to be held Oct. 13-15 in Long Beach, CA. The Vanderbilt REU program prides itself on its supportive atmosphere combined with very rigorous science. Students from the Vanderbilt REU program won the SACNAS outstanding undergraduate poster in physics (Ama Agyapong, Elizabeth State U.) and in astronomy (Cameron Trujillo, Humboldt State U.) in 2015! There is an early deadline, Feb. 15, if you want an earlier decision, or a final deadline, March 15. To apply or for more information, go to www.vanderbilt.edu/AnS/physics/reu. Students wanting to apply for the Victor M. Blanco Summer Research Fellowship need only apply to the Vanderbilt NSF REU program.
Mentoring eAlliances for professional development of women faculty in physics and astronomy

AAPT recently received funding from the National Science Foundation to create mutual mentoring eAlliances for professional development of women faculty members in physics and astronomy. The eAlliances will be created to support women who are isolated in various ways—because they are minorities, because they are the only single mother in their department, because they are in one person departments, etc. eAlliances will meet initially in-person at professional meetings followed by regular electronic meetings. The intended outcome is to reduce the isolation of participating physicists and astronomers and provide support to enhance their career development.

We would like your help in identifying women faculty members in physics and astronomy and sharing information about this project with them when the project is launched in Summer 2016. Funding will be available for the eAlliances to have several face-to-face meetings and to attend a summit of members of other eAlliances. We believe that this project will be a mechanism to address the underrepresentation of women and minorities in physics and astronomy by providing support to women physics faculty, especially minority women.

Thank you in advance for your help. Please look for information coming this summer.

Idalia Ramos, University of Puerto Rico at Humacao, idalia.ramos@upr.edu.
Beth Cunningham, Executive Officer, AAPT
Cindy Blaha, Carleton College
Anne Cox, Eckerd College
Barbara Whitten, Colorado College

Department of Astronomy - Cornell University - 2016 Research Experiences for Undergraduates

The Department of Astronomy of Cornell University is pleased to announce its summer undergraduate research program. Students will work on individual research projects with Cornell faculty and research staff on a wide range of topics in planetary science, astronomical instrumentation, astrophysics, general relativity and cosmology. The Research Assistantships, which include a stipend of $7,000 and relocation funds up to $1,000, are for a flexible ten-week period in the summer. First-, second-, or third-year undergraduates who are US citizens or permanent residents may apply. Students must have completed at least one year of undergraduate academic training by June 2015. Eight Research Assistantships will be available. To view the research projects and to apply, please visit: http://astro.cornell.edu/specialprograms/reu/. Completed applications AND supporting materials must be received by February 8, 2016. Contact: REU Astronomy Coordinator, reu@astro.cornell.edu, (607) 255-0288.

EERE Robotics Internship Program

The EERE Robotics Internship Program offers hands-on, short-term practical internships at various corporate partners throughout the United States. Interns will perform research or other technical activities under the guidance of a mentor who is a technical staff scientist or engineer at the host facility. This program is a partnership between the public and private sectors to continue the development of the robotics technical, manufacturing, and engineering workforce. The internship program is recruiting both current college...
private sector to continue the development of the robotics technical, manufacturing, and engineering workforce. The internship program is recruiting both current college students and recent high school and college graduates who have experience in robotics competitions. Apply now: [http://www.orise.orau.gov/roboticsinternship/](http://www.orise.orau.gov/roboticsinternship/).

**Deadline:** February 28, 2016

---

The Institute for Advanced Composite Manufacturing Innovation (IACMI) has a summer internship program for undergraduate and graduate students interested in learning advanced composites technologies to aid in the creation of low-cost and energy-efficient manufacturing. Internship participants will use state-of-the-art manufacturing equipment and interact with scientists and engineers who are at the top of the advanced composites and manufacturing fields, and will receive a weekly stipend of $600 for undergraduates and $750 for graduate students, a housing allowance up to $175 weekly, and travel expenses. Interested applicants will have the opportunity to apply for internships at one of five IACMI partner locations: Composite Materials for Compressed Gas Storage (Dayton); Design, Modeling and Simulation (West Lafayette); Composite Materials and Process (Knoxville, Nashville, and Lexington); Composite Materials for Wind Turbines (Golden); Composite Materials for Vehicles (Detroit).

**Application deadline:** March 15th, 2016. Program dates: June 6th – August 12th, 2016. For more info contact contact Dr. Nicie Murphy at nicie.murphy@orau.org, www.orau.org/IACMI.

---

**Domestic Nuclear Detection Office - Summer Internship Program**

The U.S. Department of Homeland Security (DHS) Domestic Nuclear Detection Office (DNDO) Summer Internship Program will provide opportunities for undergraduate and graduate students to participate in projects focused on helping DNDO meet its mission of “implementing domestic nuclear detection efforts for a managed and coordinated response to radiological and nuclear threats, as well as integration of federal nuclear forensics programs.” Internships will primarily focus on projects related to Advanced Technology Demonstration programs, or are otherwise in the areas of: Materials Research and Supporting Technology, Advanced Analytics, Nuclear Forensics, Program Management, Radiation Detection, and Shielded Special Nuclear Material (SNM) Detection. Undergraduate students receive a stipend of $600 per week plus travel expenses. Graduate students receive a stipend of $700 per week plus travel expenses. Research experiences are anticipated at: Argonne National Laboratory (Lemont, IL) • Lawrence Berkeley National Laboratory (Berkeley, CA) • Lawrence Livermore National Laboratory (Livermore, CA) • Los Alamos National Laboratory (Los Alamos, NM) • National Security Technologies – Remote Sensing Laboratory (Los Vegas, NV and Andrews AFB, MD) • Oak Ridge National Laboratory (Oak Ridge, TN) • Savannah River National Laboratory (Aiken, SC). Areas of research: Engineering, earth and geosciences, computer science, mathematics, physics, chemistry, biological / life sciences, environmental science, and more. U.S. citizenship required. Application deadline: January 27, 2016. Additional information and how-to-apply instructions can be found at: [https://www.zintellect.com/Posting/details/1626](https://www.zintellect.com/Posting/details/1626).

---

**University of Groningen - PhD position Experimental Nuclear Physics**

The KVI-CART nuclear physics group has expertise in the application of fast (gas-phase) chemical separation techniques for nuclear physics studies. The group also has strong collaborations with...
separation techniques for nuclear physics studies. The group also has strong collaborations with international partners focusing on high precision mass spectrometry to study exotic nuclei. We are seeking an enthusiastic, motivated student who is looking for a challenging project in the field of experimental nuclear physics and mass spectrometry. The project will be carried out at KVI-CART within the TITAN group (https://titan.triumf.ca) at TRIUMF. The first part of the project will be the development of a gas-catcher coupled with a time-of-flight mass spectrometer to be used for gas chemical separations of short-lived isobaric nuclei and studies of superheavy elements. The second part of the project will be carried out at the TITAN facility at TRIUMF. Short-lived, exotic isotopes will be measured to high precision via Penning trap mass spectrometry to gain information on nuclear shell evolution.

We are looking for a highly motivated person with interest in experimental nuclear physics to start on the available project. For a PhD position at KVI-CART, an MSc degree in Physics, Applied Physics or another related field is a prerequisite. Successful candidates are expected to have a PhD thesis finished at the end of the four-year term of the position. The conditions of employment are available at the University of Groningen website under Human Resources: http://www.rug.nl/about-us/work-with-us/. For information you can contact: Dr. Julia Even, j.even@rug.nl. You may apply for this position before January 31st 2016 Dutch local time by means of the application form (click on “Apply” on the advertisement on the university’s website). Applicants should send their curriculum vitae along with a motivation letter, list of marks, summary of their Master's thesis and the names and e-mail addresses of three references.

Instructor of Physics

General duties include: develop and communicate to students clear course objectives and goals; plan and develop an instructional program that helps students assimilate specific course content and skills; hold tutorial sessions as outlined by discipline; regularly monitor and evaluate students’ progress; serve as academic advisor to a small group of students (beginning in the second year of employment); serve as a Mini-Term sponsor; attend departmental, faculty, and staff meetings; serve on departmental, faculty, and school-based standing committees; write recommendations for up to 15 students each year (appropriate percentage for part-time teachers), as requested; participate in professional development and personal intellectual growth activities. Participate in one or more of the following activities: provide information, service, and expertise to other schools and organizations; assist students on special projects, independent and individual study, and seminar-based studies; participate in the Admissions Process by recruiting, selecting, and advising prospective students; participate in the NCSSM alumni activities; provide assistance for school-sponsored programs and extra-curricular activities. Specific Duties: Teach 3 sections of introductory and/or elective physics courses each trimester, with special emphasis on lab-based activities. When applying, please include a cover letter that addresses your interests in teaching physics to gifted high school students, and statement of teaching philosophy. How to Apply: Submit electronic application via: http://www.oshr.nc.gov/. Please create an account, search for “Instructor of Physics” vacancy, and complete/submit online application.

Accelerator Scientists - Cornell Laboratory for Accelerator Sciences

The Cornell Laboratory for Accelerator-based Sciences and Education has openings for accelerator scientists for projects including: (1) design, construction and commissioning of a multturn energ...
scientists for projects including: (1) design, construction and commissioning of a multiturn energy recovery linac (ERL) with FFAG optics, (2) upgrade of the 5 GeV storage ring for single beam operation with undulators as a source of hard x-rays, (3) high brightness electron sources, (4) and development of instrumentation and beam physics experiments with the CESR Test Accelerator (CesrTA). The successful candidate will contribute by developing beam optics, accelerator equipment or beam instrumentation, and participating in commissioning and operations. CLASSE is a world leader in accelerator science and its applications. Requirements include:

- PhD in physics or engineering, with a background in one or more of the following: electrodynamics; high power RF technology and sources; electron beam physics; beam instrumentation;
- Demonstrated experience with experimental systems;
- Demonstrated strong written and verbal communication skills;
- Ability to direct technical support personnel;
- Experience working as part of a team in a collaborative and multidisciplinary scientific environment;
- Familiarity or ability to quickly learn safety practices relevant to radiation generating devices.

The initial appointment is for three years with the possibility of extension. Applications should be submitted at [http://academicjobsonline.org/](http://academicjobsonline.org/) (posting #6911) and should include a cover letter, a CV, a list of publications, a detailed summary of research experience and interests. Applicants must arrange to have at least three letters of recommendation uploaded, as per instructions on the [academicjobsonline website](http://academicjobsonline.org/). Starting date is negotiable.

---

A free residential summer program in nuclear science and astrophysics on the campuses of Michigan State University and University of Notre Dame

Three one-week sessions in 2016:

**HS Students**  6/26 - 7/1  (ND)

**Science Teachers**  7/24 - 7/29  (MSU)

**HS Students**  7/31 - 8/5  (MSU)

Apply online by April 4 at [www.jinaweb.org/outreach/pan](http://www.jinaweb.org/outreach/pan)
Harvard Future Faculty Leaders

Postdoctoral Fellowship

We invite applications for Harvard Postdoctoral Fellowships for Future Faculty Leaders from individuals who will carry out a research program in astronomy or physics, and will also contribute to increasing diversity and inclusion in these fields. Contributions may include increasing the participation in science research of underrepresented minorities through teaching, mentoring, research advising, and public outreach. The program targets individuals with unique perspectives in their research, critical insights that result from non-traditional paths to academia that can contribute to increasing diversity at Harvard and in the national community of astronomers and physicists. The program is intended for candidates completing their doctorate, or completed their doctorate but have not yet begun a postdoctoral position, or any individual for whom additional mentoring and training is desired to prepare for a future postdoctoral or faculty opportunities. The program provides for a postdoctoral fellowship during which access to Harvard facilities, mentorship, and professional development will help to complete the fellow’s transition to independent scientist. Starting date is September 1, 2016, but an earlier start date is possible. Position is for two years, renewable for a third year. For application instructions and more information contact David Charbonneau, FFLpostdoc@cfa.harvard.edu, https://www.cfa.harvard.edu/opportunities/fellowships/fflpostdoc/.

Tenure-track - assistant professor - physics education

The Department of Physics (physics.cos.ucf.edu) at the University of Central Florida invites applications for a tenure-track position at the assistant professor level beginning in August 2016. We seek candidates with experience in physics education research to add to UCF’s blossoming program in that area. The successful applicant is expected to establish a vigorous, externally funded and creative research program and have a strong commitment to excellence in graduate and undergraduate education. The Department of Physics currently has 45 faculty members, and offers B.S., M.S., and Ph.D. degrees. A B.A. program with emphasis on education is now in place. Research programs include condensed matter physics, surface physics, nanoscience, soft condensed matter, planetary sciences, biological physics, atomic and optical physics, quantum information processing, and physics education. Pedagogical reforms are already underway, facilitated by grants from PhysTEC (comprehensive site), the APS Bridge Program, and NSF, as well as by the acquisition of a large studio classroom. There are opportunities to benefit from joint activities in the College of Education and Human Performance, iSTEM (a new interdisciplinary initiative to recruit students into STEMdisciplines and promote STEM education research), and the Faculty Center for Teaching and Learning. The successful candidate will join several recent hires in STEM education research. https://www.jobswithucf.com/postings/43778.
Applications for the 2016 L’Oréal USA For Women in Science fellowship program are now open. In the US, the Women in Science Fellowship Program awards five post-doctoral women scientists annually with grants of $60,000 each. Applicants are selected from a variety of fields, including the life and physical/material sciences, technology (including computer science), engineering, and mathematics. Application and information can be found at www.lorealusa.com/forwomeninscience. Applications are due on Friday, February 5, 2016. For additional information, please e-mail Rachel Pacifico at rpacifico@us.loreal.com.

This is the second call to participate to the “XII International
This is the second call to participate to the “XII International Symposium on Radiation Physics”, that will be held in the Carolino Building of the “Benemérita Universidad Autónoma de Puebla” (downtown of Puebla city), México; from 6 to 8 April, 2016.

Deadline to submit abstracts: February 12, 2016.

Deadline to submit full papers: April 6, 2016.

Hotel: participants will have a special rate in the “Hotel Palacio San Leonardo” www.hotelsanleonardo.com.mx.

Scientific topics include: radiation physics, environmental radiation, radon, materials and interaction with the radiation, particle accelerators, radiation applications, radiochemistry, Radiobiology, instrumentation.

Oral presentations will have the opportunity to publish an article in the AIP Proceedings journal.

Conference fee: $200 US Dlls.

Send your abstract submissions and questions to Guillermo Espinosa espinosa@fisica.unam.mx, or Jorge A. López jorgelopez@utep.edu.

Note: the picture is real not a montage, taken after the snow last week. The symposium organizers already made arrangements to have the volcano smoking during the duration of the symposium.

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. http://www.hispanicphysicists.org/.