



# The Hispanic Physicist

The Newsletter of the National Society of Hispanic Physicists

Year 20

March 23, 2016

## NSHP/USA Science and Engineering Festival (USA SEF)

NSHP will be participating at the USA Science and Engineering Festival in Washington DC, April 16 & 17 ([www.usasciencefestival.org](http://www.usasciencefestival.org)). The USA SEF it is a mammoth gathering of science, engineering, mathematics, education ... societies and employers in an outreach effort to promote STEM careers and education to the public. Speakers, demonstrations and activities from Friday night to Sunday afternoon.



**NSHP is looking for volunteer students and faculty to help staff both our own booth and share in Big Top Physics**, the common physics & astronomy exhibit jointly hosted by APS, AAPT, AIP, AAS ... No experience necessary. Volunteers will be trained in the demonstrations being used at the booths. **If you are interested in being at the USA SEF and helping out at our booths please contact Juan Burciaga ([jburciag@bowdoin.edu](mailto:jburciag@bowdoin.edu)) for more information.** There are no funds available for travel to the USA SEF and so volunteers would need to be responsible for their own travel expenses.



## NSHP/NSBP Meetup at APS April Meeting

The joint NSBP/NSHP meetup will take place at the APS April meeting in Salt Lake City Convention Center on Sunday, April 17th from 6:30 - 7:00pm just before the Education & Diversity Reception. **Do not miss it!**



## Mentors needed by APS' National Mentoring Community

The American Physical Society (APS) has established the National Mentoring Community (NMC) to provide support to African American, Hispanic American, and Native American students as they navigate the path toward earning an undergraduate degree in physics. The NMC is identifying mentors throughout the country who can establish a personal relationship with students and provide them with guidance and support. Mentees will be identified by mentors, and the program will provide support to help mentees and mentors get the most out of their relationship. Current physics faculty (including those of you at community and 2-year colleges) who are already mentoring students or are interested in doing so are encouraged to register to become an NMC mentor today. [Learn more and register on the APS website](#), and don't forget to save the date for the [NMC Annual Conference](#), which will take place at the University of Houston, October 21 - 23.





## EXTRAORDINARY MEMBERS

### Arturo Menchaca named General Coordinator of Mexico's CCC

NSHP member Arturo Menchaca was recently named General Coordinator of the Science Advisory Council of the Mexican Presidency for the period 2016-2019.

At Mexico's UNAM Arturo has had a distinguished career in nuclear physics, has directed the Institute of Physics, the Mexican Academy of Sciences and the Mexican Society of Physics, among other achievements.



As his first call of duty, Arturo met with his US counterparts John Holdren and Jo Handelsman at the White House last Feb. 5 to find us research money for collaborations with Mexico.

**Congratulations to Arturo!**

### President Obama Honors Marcel Agueros

President Obama awarded the Presidential Early Career Awards to NSHP Life Member Marcel Agueros; the Career award is the highest honor bestowed by the United States Government on science and engineering professionals in the early stages of their independent research careers.

Marcel earned a BA in Astronomy at Columbia University, an M. Phil in physics at Cambridge (U.K.), and MS and PhD degrees at the University of Washington, Seattle. He was a postdoctoral Fellow at Columbia University, and is now an Assistant Professor at Columbia University. In addition to the Presidential Career Award, he also received the NSF Faculty Early Career Development (CAREER) award in 2013 and several other honors. Selected participant, Summer Leadership Institute, Society for the Advancement of 2011.



**NSHP salutes Marcel!**



Dear Jorge,

I am writing to you in regards to the February 25, 2016 issue of the Hispanic Physicist newsletter. The newsletter article on the front page states "Mario Diaz's CGWA co-discovers first gravity wave". I would like to correct that statement which I feel does not make justice to one of the most outstanding scientific discoveries in recent

times. The first detection of a gravitational wave, which at the same time constitutes the first direct observation of a black hole and of the collision of a black hole binary system to form one larger than the two original ones combined, is the result of a tremendous amount of hard work of hundreds of individuals. The article in Physical Review Letters from February 12, 2016, communicating this result is signed by one thousand two authors.

Stating that I am a co-discoverer is not only making my contribution look larger than what it was, it does not do justice to the work of a team. And the patience and hard work of a very large team is what it took to make this scientific feat possible. I would appreciate it very much if you publish this note in the next issue of the newsletter.

Sincerely,

Mario C. Díaz, Director, Center for Gravitational Wave Astronomy, University of Texas Rio Grande Valley  
[mario.diaz@utrgv.edu](mailto:mario.diaz@utrgv.edu), <http://www.mariodiaz.org/>



# Research Experiences For Undergraduates

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## 2016 Summer Research Experiences for Undergraduates at University of Alabama at Birmingham



We are recruiting for REU program in "Experimental and Computational Materials Research" from May 15 to July 22, 2016. We offer a broad range of interdisciplinary materials research experiences to undergraduate students with diverse backgrounds in physics, chemistry, applied mathematics, and engineering. The stipend for the 10-week period is \$5000 and housing will be provided to non-local participants. The research projects include, but are not limited to, electronic materials, nano-materials, lasers & optical materials, biosensors, biophysics & biomaterials and computer modeling. The scientific research projects are developed specifically for undergraduates by an interdisciplinary team consisting of science and engineering faculty at UAB.

Also note that the application will be submitted electronically via our web site:

<https://www.uab.edu/cnmb/research-experiences-for-undergraduates>. **Applicants will need to submit an official transcript and request recommendations from two (2) faculty members. Our application deadline is April 1, 2016. Decision will be made no later than April 15, 2016.**

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## DOE Office of Science Graduate Student Research (SCGSR) Program



U.S. DEPARTMENT OF  
**ENERGY**

The Office of Science Graduate Student Research (SCGSR) program is now accepting applications. The deadline for online application is May 11, 2016, 5:00PM Eastern Time. Details of the program and online application can be found at: <http://science.energy.gov/wdts/scgsr/>.

The goal of the Office of Science Graduate Student Research (SCGSR) program is to prepare graduate students for science, technology, engineering, or mathematics (STEM) careers critically important to the DOE Office of Science mission, by providing graduate thesis research opportunities at DOE laboratories. The SCGSR program provides supplemental awards to outstanding U.S. graduate students to pursue part of their graduate thesis research at a DOE laboratory in areas that address scientific challenges central to the Office of Science mission. The research opportunity is expected to advance the graduate students' overall doctoral thesis while providing access to the expertise, resources, and capabilities available at the DOE laboratories.

The SCGSR program provides supplemental funds for graduate awardees to conduct part of their thesis research at a host DOE laboratory in collaboration with a DOE laboratory scientist within a defined award period. The award period for the proposed research project at DOE laboratories may range from 3 to 12 consecutive months.



<http://www.hispanicphysicists.org/JobBoard.html>

<b>Harvard University</b> <a href="#">Harvard Future Faculty Leaders Postdoctoral Fellowship</a>	Deadline: February 1, 2016
<b>Arizona State University (AZ)</b> <a href="#">Honors/Open Field/Open Rank</a>	Review begins: February 4, 2016
<b>Acoustical Society of America</b> <a href="#">Education and Outreach Coordinator</a>	Deadline: February 26, 2016
<b>University of Oregon</b> <a href="#">Physics Lab Instructor</a>	Review begins: March 1, 2016
<b>Colorado State University</b> <a href="#">Astronomy instructor full-time, non-tenure-track faculty</a>	Apply by: March 9, 2016
<b>Fermi National Accelerator Laboratory</b> <a href="#">Postdoctoral Research Associate (CMS)</a>	Close Date: May 29, 2016
<b>National Science Foundation (NSF), Arlington, VA</b> <a href="#">DEPUTY DIVISION DIRECTOR</a> <a href="#">DIVISION OF ASTRONOMICAL SCIENCES</a>	Open period begins: February 22, 2016
<b>Acoustical Society of America</b> <a href="#">Education and Outreach Coordinator</a>	Deadline: February 26, 2016
<b>University of Connecticut</b> <a href="#">College of Liberal Arts and Sciences</a> <a href="#">Department of Physics</a> <a href="#">Assistant Professor In-Residence</a>	Review begins: February 29, 2016
<b>Berkeley Lab</b> <a href="#">Physicist Postdoc Fellow (Advanced Light Source) - 81995</a> <a href="#">Organization: AL-Advanced Light Source</a>	Review begins: February 29, 2016
<b>University of Oregon</b> <a href="#">Physics Lab Instructor</a>	Review begins: March 1, 2016
<b>Colorado State University</b> <a href="#">Astronomy instructor full-time, non-tenure-track faculty</a>	Apply by: March 9, 2016
<b>Case Western Reserve University</b> <a href="#">Visiting Assistant Professor</a>	Apply by: March 21, 2016
<b>Case Western Reserve University</b> <a href="#">Visiting Faculty Position - Theoretical Particle/Astrophysics/Cosmology</a>	Review begins: April 5, 2016

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## Tenure-track Faculty Position in Experimental Cosmological Physics



The Department of Physics at UC San Diego (<http://physics.ucsd.edu>)

invites applications for a tenure-track faculty position in experimental cosmological physics, to begin July 1, 2016. We particularly encourage applications from individuals working in experimental cosmology and/or detector physics that is synergistic with ongoing cosmology experiments in the Department: cosmic microwave background polarization, astrophysics using mm-wave spectroscopy, searches for astrophysical evidence of fundamental physics, and multi-frequency studies of galactic emission. Current faculty are playing key roles in the BICEP, LiteBIRD, POLARBEAR-1, POLARBEAR-2, and Simons Array experiments. Candidates must hold a doctorate in Physics or a closely related field, must have demonstrated an ability to conduct outstanding research, and show promise for excellent teaching at both the undergraduate and graduate level.

Review of applications will commence on March 31, 2016 and continue until the position is filled. Please submit a cover letter, curriculum vitae, statement of past and proposed research, statement of proposed teaching, and a separate statement on past experience and leadership in equity, diversity, and inclusion and/or proposed future contributions (see <http://facultyexcellence.ucsd.edu/c2d/index.html>). Applications should be submitted online at <https://apol-recruit.ucsd.edu/apply/JPF1024>. Candidates must also arrange to have three letters of reference that address research, teaching, and professional service posted to the above website.

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## Postdoctoral Research Associate Program at Savannah River National Laboratory



Through the Oak Ridge Institute for Science and Education (ORISE), Savannah River National Laboratory has two job openings for recent PhD graduates interested in materials science and nanotechnology:

SRNL Materials Science and Technology – Postdoctoral Researcher Job,  
<http://orau.org/srnl/applicants/description.aspx?JobId=19407>

SRNL Materials and Nanotechnology – Postdoctoral Researcher Job  
<http://orau.org/srnl/applicants/description.aspx?JobId=19164>

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## Full-Time One-Year Position in Physics - University of Minnesota, Morris



The University of Minnesota, Morris seeks an individual committed to excellence in undergraduate education, to fill a full-time, one-year position in physics beginning August 15, 2016. Responsibilities include: teaching undergraduate physics courses including general physics with labs, mechanics, statistical physics, and introductory astronomy; contributing to other courses that support the physics curriculum; and sharing in the governance and advancement of the physics program as well as the campus at large. Candidates must be at least A.B.D. in physics, or a closely related field by August 15, 2016. Experience teaching undergraduate physics is required. (Graduate TA experience is acceptable).

Applications must be submitted on-line: <http://www1.umn.edu/ohr/employment/> Job ID 308080. Applications must include a letter of application, resume, graduate and undergraduate transcripts, a teaching statement with evidence of teaching effectiveness, and three letters of reference. Supporting documentation may be sent to Ann Kolden, Administrative Assistant, at [koldenal@morris.umn.edu](mailto:koldenal@morris.umn.edu), 320 589-6301.

Applications will be accepted until the position is filled. Screening begins March 21, 2016. Inquiries can be made to Professor Michael Korth, Search Committee Chair, at (320) 589-6317 ([korthms@morris.umn.edu](mailto:korthms@morris.umn.edu)).

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**IN:Theory – Post-doc position - Interdisciplinary Applications of Nuclear Theory: from atoms and molecules to stars**



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

A two-year post-doc position (Assegno di Ricerca Grant biennale) is available in the field of Theoretical Nuclear Physics within the Department of Physics and Astronomy “G.Galilei” of the University of Padova, Italy, as a part of the project “Interdisciplinary Applications of Nuclear Theory: from atoms and molecules to stars” led by Prof. L. Fortunato. More detailed information on the scientific program and on the duties of the research fellow is available upon request to the P.I. This call in the web: [www.pd.infn.it/~fortunat/PRAT.html](http://www.pd.infn.it/~fortunat/PRAT.html)

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**Los Alamos National Laboratory**

**Fields Novel and Unique Diagnostics Postdoc - Neutron Science & Technology - Los Alamos National Laboratory**

The Neutron Science and Technology group (P-23) at Los Alamos National Laboratory is inviting applicants interested in a post-doctoral appointment working on fields novel and unique diagnostics to measure and understand the behavior of plutonium and other materials under extreme conditions at the LANL and the Nevada National Security Site in support of science-based stockpile stewardship. Primary thrusts include flash X-radiography, proton radiography, high-speed visible imaging, high-bandwidth massively multiplexed velocimetry, optically based temperature measurements and other innovative experimental diagnostic techniques.

The successful candidate will contribute to P-23, with an emphasis on fielding experiments and exploring the physics of materials under extreme conditions. Particular tools for these energetically driven hydrodynamic experiments include high explosives; high-velocity gas guns; and high-current, high-voltage pulsed power. Sophisticated diagnostics like time-resolved pyrometry, x- and proton-radiography, multi-point laser velocimetry, and particle measurement techniques measure the phenomena of interest. (<http://www.lanl.gov/org/padste/adepts/physics/neutron-science-technology/index.php>)

For further information, please contact Dr. David Oro ([oro@lanl.gov](mailto:oro@lanl.gov), (505) 665 0441). In addition to applying on-line, please submit a cover letter addressing how you meet the required and desired skills, a CV including a list of peer-reviewed publications and talks, and the names of 3 references. A current C.V. with the following categories is preferred: Educational background, degree dates, GPA with scale; Experience; Competitive honors; Relevant extracurricular activities; Invited presentations; Grants; Patents; Publications. Evaluation of applications will commence immediately and continue until the position is filled.

For general information to the Postdoc Program go to <http://www.lanl.gov/careers/career-options/postdoctoral-research/index.php>. Contact: Dr. Anna Llobet, Deputy Group Leader (acting), P-23 Neutron Science and Technology, Los Alamos National Laboratory, MS-H803, Los Alamos, NM 87545, USA, Phone: +1 505 665-1367, Email: [allobet@lanl.gov](mailto:allobet@lanl.gov), WWW: <http://lansce.lanl.gov/>

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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/>.