NSHP becomes an incorporated 501c3 organization under the sponsorship of SURA

On August 14, 2014, representatives of the National Society of Hispanic Physicists held a meeting in conjunction with Southeastern Universities Research Association (SURA) in Washington DC at SURA headquarters. Present from the NSHP Board were Luz Martinez-Miranda (President), David Ernst (Past President), Ramon Lopez (Secretary), joined by telephone by Juan Burciaga (Education Officer) and Raul Armendariz (Technical Officer), along with Elizabeth Lawson, representing SURA and now the new NSHP Assistant Secretary who will handle liaison issues. At this meeting, the final organization of the NSHP was concluded and the NSHP became an incorporated 501c3 organization under the sponsorship of SURA. Special thanks are in order to Jesus Pando, who was unable to attend the meeting but who had led the negotiations with SURA that resulted in the incorporation the NSHP. The Board of the NSHP invites all members and friends of the NSHP to celebrate this moment.

A special meeting of the NSHP will be held at the annual SACNAS conference. Since the new entity is an educational organization, gifts to the NSHP are fully tax deductible. This also means that the NSHP will begin collecting member dues again and all current members should consider their membership to be expired pending the new membership drive. More details about that and how to become a member will be announced soon.

Call for APS Committee Nominations

The APS committees listed below play a major role in guiding the Society’s activities. At the end of each year, about a third of the members of these committees finish their terms and the APS Committee on Committees seeks nominations for their replacements. I am writing to urge you to nominate APS members who in your opinion have the necessary expertise and interest. A description of each of these committees is available from the online nomination form. Please feel free to nominate yourself.

- Publications Oversight Committee
- Committee on Careers & Professional Development
- Committee on Constitution & Bylaws
- Fellowship Committee
- Committee on Membership
- Committee on Education
- Committee on Minority
- Committee on Meetings
- Committee on the Status of Women in Physics
- Investment Committee
- Physics Policy Committee
- International Freedom of Scientists
- Committee on International Scientific Affairs
- Historic Sites Committee
- Committee on Informing the Public

Please send your nominations to the Committee on Committees by using the online form. It is vital that you provide as much information as you can about the person you are nominating, particularly your statement regarding what strengths this person has that will be valuable to the committee. Attracting and serving a diverse and inclusive community of physicists is an important goal of the APS, and we encourage nominations and recommendations for members of all backgrounds to serve on our committees.

NSHP incorporation meeting, From the left: Elizabeth Lawson, David Ernst, Luz Martinez-Miranda, Ramon Lopez, and by phone Juan Burciaga and Raul Armendariz. (Photo, R Lopez)
membership worldwide is a primary goal for APS. In calling for nominations, I wish to remind you how important it is to give full consideration to qualified women and members of under-represented minority groups, as well as to candidates from outside the United States.

NSAC Workforce Announcement For Mentors of Graduate & Undergraduate Students

The NSAC workforce report recommends that mentors of undergraduate and graduate students should expand their knowledge of prestigious fellowship opportunities and help these students in developing competitive applications for these awards. Students who are U.S. citizens or permanent residents with strong academic and research backgrounds and with high potential for success in Ph.D. studies and research should be encouraged to apply for these awards. To develop competitive proposals, especially the research components, the students need to work with their advisors and research mentors. Senior undergraduate and first-year graduate students are eligible, with more limited opportunities for second-year students. Fellowships include competitive stipends and funds for tuition and fee remission. Opportunities related to nuclear science include:


Department of Energy (DOE) Computational Science Graduate Fellowship: http://www.krellinst.org/sscf/. Anticipated deadline January 2015. Fields of study include astrophysics and physics in which recipients use math and computers for their research. New program to support Ph.D. candidates in residence at DOE Science laboratories.


The American Physical Society (APS) and The Chinese Physical Society (CPS) are pleased to announce the upcoming

U.S. - China Young Physicists Forum

for Graduate Students in Condensed Matter & Materials Physics

Saturday, February 28 - Sunday, March 1, 2015
(The weekend before the APS March Meeting)
San Antonio, TX

The American Physical Society (APS) and the Chinese Physical Society (CPS) have been working to bring together young physicists from our two countries. As many graduate students from the United States and China already plan to attend the 2015 APS March Meeting in San Antonio, Texas, the APS and CPS will hold a “U.S.-China Young Physicists Forum” the weekend before the March Meeting begins.
The U.S.-China Young Physicists Forum (YPF) will combine scientific sessions with career development and networking opportunities for the graduate students, with each country sending ~30 students (~60 total) for this meeting.

The Forum will span a day and a half, and focus upon Condensed Matter Physics and Materials Physics graduate students. Through special topical and technical sessions, it will provide graduate students from the United States and China with:

- plenary physics sessions with U.S. & Chinese senior scientists
- research presentations by participating U.S. and Chinese students during parallel and poster sessions
- career development discussions on publishing in peer-reviewed journals and careers outside of academia
- graduate student-oriented networking and social events

Note: The program especially encourages U.S. graduate students without much prior experience in China to participate in the Forum.

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**Northeastern University STEM Future Faculty Fellowship Program**

Northeastern University invites nominations and applications from candidates in the STEM (science, technology, engineering and mathematics) fields for the Northeastern University STEM Future Faculty Fellowship (Postdoctoral) Program. Consistent with Northeastern’s mission, vision and core values, the objectives of the STEM Future Faculty fellowship program are:

1) encourage and promote excellence and diversity in the pool of future faculty candidates in the STEM fields;
2) introduce qualified postdoctoral researchers in the STEM fields who are considering faculty careers;
3) enhance opportunities for academic careers in the STEM fields for persons from diverse backgrounds;
4) prepare Future Faculty Fellows for possible tenure-track appointments at Northeastern;
5) enhance the academic environment of STEM fields by providing opportunities for students and faculty to gain experience in multi-cultural, broadly diverse and inclusive work settings and research collaborations.

A complete Future Faculty Fellowship description can be found online at:

[http://www.northeastern.edu/advancement/recruitment/northeastern-university-stem-future-faculty-fellowship-program/](http://www.northeastern.edu/advancement/recruitment/northeastern-university-stem-future-faculty-fellowship-program/)

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**Cornell University**

**Cornell High Energy Synchrotron Source**

**Engineering Materials Specialist at CHESS/Cornell**

The new Office of Naval Research-sponsored center called Instell (Integrated Simulation and x-ray Interrogation Tools and training for micromechanics) at the Cornell High-Energy Synchrotron Source (CHESS) in Ithaca, New York, USA has an opening for a Materials Characterization Specialist (Research Associate). The successful candidate needs proven expertise in HEXD, mechanics of structural materials, and a strong familiarity with FE modeling. In addition to supporting (mostly novice) HEXD users, the candidate must pursue a personal research program to develop next generation HEXD experiments, data collection algorithms and models. A PhD in mechanical/structural engineering or materials science with an emphasis on mechanics is preferred; a Ph.D. in other relevant physical sciences also considered. At least 2 years of post-PhD experimental experience, a solid publication record, and excellent communication skills are essential. Previous industrial interactions are also important. This is a yearly appointment, but will be renewed annually based on
satisfactory performance and availability of funds.

Applications should be submitted at http://academicjobsonline.org/ (posting 4313) 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. For information about the position, contact Dr. Matthew Miller at mpm4@cornell.edu. The starting date is negotiable.

Scientific Associate II in the LSST group, Instrumentation Division, Brookhaven National Laboratory

Brookhaven National Laboratory is a nonprofit research and development institution whose purpose is to advance ideas and knowledge through a multidisciplinary program of basic and applied research. The Instrumentation Division currently has an opening for a Scientific Associate II in the LSST group. This position will be in the LSST group in the Instrumentation Division to join in the development of the readout electronics and overall optimization of the 3.2Gpixel focal plane array based on state-of-the-art deep depletion charge-coupled devices (CCD).

The LSST Project is preparing for construction of a large ground-based observatory in Chile. The 8.4 meter LSST will survey the entire visible sky deeply in multiple colors every week, probing the mysteries of Dark Matter and Dark Energy, and opening a window on objects that change or move rapidly; exploding supernovae, potentially hazardous near-Earth asteroids, and distant Kuiper Belt Objects. The LSST group is in need of a talented individual to perform detailed electro-optic characterization and analysis on pre-production prototypes, and to have a significant role in guiding the development of the final mixed-signal CCD readout hardware.

Required Knowledge, Skills and Abilities:

- Minimum of a Bachelor's degree in Electrical engineering, Physics, or Applied Physics.
- Five (5) years progressively responsible, related work experience, including supporting research programs following established methods and standards for investigation and experimentation.
- Knowledge of mixed-signal circuits, low noise signal processing, digital signal processing and modern electronic components.
- Significant experience with laboratory instrumentation, computing, and data analysis.
- Hands-on problem solving skills.
- Ability to work as part of a team.

Preferred Knowledge, Skills, and Abilities:

- A Master’s degree or PhD in Electrical Engineering, Applied Physics or closely related field strongly desired.
- Experience with electro-optical characterization of imaging systems for astronomy.
- Experience in optimizing the performance of scientific detector readout systems.
- Familiarity with CCD imagers and readout electronics.
- Working knowledge of circuit schematic entry and PCB layout.
- Python programming experience.

We invite you to consider Brookhaven National Laboratory for employment. To be considered for this position, apply online at www.bnl.gov and click Jobs, then click Search Job List and apply to job # 16748.

Post-Doctoral Fellowship Opportunities, Univ. of Johannesburg, South Africa

MATERIALS PHYSICS UNDER EXTREME PRESSURE TEMPERATURE CONDITIONS

Research may be conducted in at least one of the following areas:

- Magnetic-electronic phenomena at high pressure in strongly correlated electron systems;
- Iron-bearing minerals of geophysical interest;
- New ultra-hard phases for potential industrial applications;
- P-T response of nanophase materials.

Candidate should have some prior experience in one of the following (in order of preference) -- DACs, XRD structural & materials characterisation, electrical-transport or magnetics, laser-related research. The fellowship is available for one year in the first instance, potentially renewable for a second year. The successful candidate may commence research within 3 - 6 months after sending the first expression of interest. An expression of Interest and CV should be submitted to: e-mail: ghharne@uj.ac.za, Prof. Giovanni, Hearne Dept. of Physics, U. of Johannesburg PO Box 524 Auckland Park 2006 Johannesburg, South Africa.

New Ph.D. looking for postdoctoral, research position or teaching position

Dr. Carlos Chaparro recently graduated from Notre Dame with a Ph.D. in Experimental Solid State Physics, with research performed at Argonne National Laboratory in the area of Superconductivity, Magnetism and Calorimetry. Dr. Chaparro

Columbia University Department of Physics 538 West 120th St. New York, NY 10027-6904 Phone: 212-854-1558 Fax: 212-854-1007 Email: chaparro@physics.columbia.edu
is interested in finding a postdoctoral, research position or teaching position; he has experience in teaching physics to undergraduates from Rutgers University. Contact Dr. Chaparro at cchaparr@gmail.com, 908-451-0405 and feel free to forward this announcement to anyone who might be interested. See CV attached.

Ph.D. looking for postdoctoral, research position or teaching position


Cerro Tololo Inter-American Observatory La Serena, Chile REU Program

Students wanted for a paid astronomy internship in Chile!

The Cerro Tololo Inter-American Observatory (CTIO) offers six Undergraduate Research Assistantships in La Serena, Chile, during the Chilean summer (northern winter semester) through the National Science Foundation-funded Research Experiences for Undergraduates (REU) program. The CTIO REU program provides an exceptional opportunity for undergraduates considering a career in science to engage in substantive research activities with scientists working at the forefront of contemporary astrophysics. Student participants will work in close collaboration with members of the CTIO scientific and technical staff on specific research projects with topics such as galaxy clusters, supernovae, planetary nebulae, stellar populations, star clusters, star formation, variable stars, and interstellar medium. The CTIO REU program emphasizes observational techniques and provides opportunities for direct observational experience using CTIO’s state-of-the-art telescopes and instrumentation.

Participants in the REU program must be enrolled as full-time undergraduate students at a U.S. university during the REU program, must be citizens or permanent residents of the United States, and must be majoring in astronomy, physics, or a related field (e.g. engineering, computer science, geology, mathematics).

The program will run for 10 weeks, from approximately 9 January to 21 March 2015. A two-night observing run on Cerro Tololo and a field trip to another observatory in Chile are included in the program. Participants are also provided with a stipend of $220/week and subsidized housing on the CTIO compound in La Serena. In addition, the students usually attend the American Astronomical Society (AAS) winter meeting to present their research the year following their REU program, in the case the 2016 AAS meeting in Kissimmee, Florida.

Complete applications, including applicant information, university transcripts, and two or three letters of recommendation should be submitted no later than October 1st, 2014. More information and the program application can be found at: http://www.ctio.noao.edu/noao/REU. Women and candidates from underrepresented minorities in the sciences are particularly encouraged to apply.

Columbia University Atomic, Molecular and Optical Physics Faculty Position

The Columbia University Department of Physics seeks to appoint an assistant professor performing experimental research in atomic, molecular and optical physics or a related field. It is expected that the candidate will develop a vigorous independent research program, continuing the long Columbia record of outstanding accomplishment in science. Applicants for this position must possess a doctoral degree in Physics or a related field, have demonstrated the potential to do pioneering experimental research and the promise of excellence in teaching and mentoring at both the undergraduate and graduate levels.

Applications must be submitted online and must include a cover letter, Curriculum Vitae (including publication list), a brief statement of research plans, a brief statement of teaching philosophy and a list of references. Applicants also should arrange for three letters of recommendation to be sent on their behalf via the online system. For more information and to apply, please go to https://academicjobs.columbia.edu/applicants/Central?quickFind=59815. Review of applications will begin November 1, 2014 and continue until the position is filled.

West Virginia University Tenure-Track Faculty Position in Nanomaterials Growth
The Department of Physics and Astronomy (http://physics.wvu.edu) at West Virginia University invites applications for a tenure-track assistant professor in condensed matter physics specializing in growth of novel materials, e.g. quantum dots, quantum wires, thin films and/or heterostructures. The successful candidate should complement existing strengths in the areas of optical and photonic materials, energy conversion materials, magnetism, spintronics, and multifunctional materials. The Department consists of 22 tenured and tenure-track faculty, 15 research faculty and postdoctoral researchers, and 72 Ph.D. graduate students. The largest research areas are condensed matter physics, astrophysics, and plasma physics. West Virginia University has made significant investments in condensed matter physics, including three new faculty hires in 2011-2012 and a new building with world-class clean room and other laboratory facilities. See http://physics.wvu.edu/research for a description of existing research programs and facilities. Extensive campus-wide shared research facilities for sample and device fabrication and characterization are also available (http://sharedresearchfacilities.wvu.edu).

We are seeking applicants with a Ph.D. or equivalent degree in condensed matter physics or a related field with commitment and ability to lead an independent research program and to excel in teaching physics courses at the undergraduate and graduate levels. The successful candidate will have at least one year of postdoctoral research experience and present a record of research productivity as evidenced by publication record and scientific collaborations, and potential to develop an externally funded, nationally competitive research program. WVU is an Equal Employment Opportunity/Affirmative Action Employer and the recipient of an NSF ADVANCE award for gender equity. The university is committed to diversity and welcomes applications from all qualified individuals, including minorities, females, individuals with disabilities, and veterans.

To apply, e-mail a single pdf file to cmsearch@mail.wvu.edu containing (i) a cover letter addressed to the Condensed Matter Search Committee, (ii) a curriculum vitae with a full list of publications, (iii) a 2-page statement of teaching philosophy and experience, and (iv) a five-year research plan (maximum 5-pages). Applicants should arrange for three letters of reference to be sent directly to the same e-mail address. Review of applications will begin December 1, 2014.