

The Hispanic Physicist

The Newsletter of the National Society of Hispanic Physicists

Year 17

November 19, 2013

Please nominate NSHP members for APS' FIAP

Key positions that must be filled are:

- **Vice-Chair:** This position will become Chair-elect after one year, and then Chair in the third year. The future leadership of FIAP will depend critically upon our selection of this candidate.
- **Secretary-Treasurer** (Three year term): This position is critical to the smooth running of the organization. Quick responsiveness and attention to detail makes all the difference to your constituents.
- **Two Members-at-large** (Three year term)



Forum on Industrial
& Applied Physics

Responsibilities of these positions may be found at <http://www.aps.org/units/fiap/governance/bylaws.cfm>. We are seeking your recommendation for potential candidates for these positions. Among characteristics you should consider is how well the potential nominee would represent the interests of FIAP and its membership. Consider the potential candidate's achievements in physics for example through her/his publications, patents, prizes, leadership status with his or her commercial organization, Fellow status, products developed, etc.

Consider women and any minority-status FIAP members whose achievements and interests would make them fine candidates for such positions. We do not have enough women and minority-status physicists in active roles within our Society and we need many more.

Officers and Members-at-Large of the Executive Committee must be members of the FIAP for at least one year prior to nomination. The Nominations Committee would be most grateful for any suggestions you might provide, but please confirm that such candidate would agree to placement on the FIAP ballot if selected by our committee. PLEASE send the name of your suggested nominee to me by December 4 with a few sentences describing her/him to Cha-Mei Tang Nomination Committee Chair, cmtang@creatvmicrotech.com.

Alliance Academic Coordinator - University of California, Berkeley

The Mathematical and Physical Sciences Dean's Office invites applications for a full-time Academic Coordinator to implement a new program, called the California Alliance. The California Alliance is a new program, funded by the National Science Foundation-Alliance for Graduate Education and the Professoriate. It is a collaboration between Berkeley, Caltech, Stanford and UCLA, lead by Berkeley. The California Alliance's goal is to significantly increase the movement of URM students into the most competitive research and teaching careers in the mathematical, physical, and computer sciences and engineering (MPCS&E) fields. It will systematically address ethnic underrepresentation in the particular science, technology, engineering and mathematics fields (STEM) fields and at the institutions where it is most severe and remains seemingly intractable nationally. The California Alliance defines underrepresented minorities (URM) as African Americans, Chicanos, Latinos, Native Alaskans, Native Pacific Islanders, and American Indians. The AC will be the key administrator responsible for day-to-day program development and implementation for the new California Alliance.

Applications should be submitted online, and should include a cover letter outlining your experience and qualifications, CV, statement of teaching philosophy, and three letters of recommendation. All letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are provided via a third party (i.e., dossier service or career center), to the UC Berkeley statement of confidentiality: <http://apo.chance.berkeley.edu/evalltr.html>.

To apply, visit <https://aprecruit.berkeley.edu/apply/JPF00283>. The deadline for applications is November 21, 2013. The University of California is an Equal Opportunity/Affirmative Action Employer.

For more information or questions related to this position, please contact the California Alliance Director, Dr. Colette Patt, in the UC Berkeley Mathematical and Physical Sciences Deans' Office at: Colette@berkeley.edu

Lecturer in Nuclear Physics Group in Liverpool

We are seeking to recruit an outstanding individual in Nuclear Physics. We are involved in a wide range of research programmes aiming to extend our research activities in nuclear structure physics and applied work. You will develop an independent research profile that strengthens the overall scientific goals of the group. You will contribute effectively to research, teaching at both undergraduate and postgraduate levels and to academic administration. You should have a PhD in Nuclear Physics, an excellent research track record in experimental nuclear physics and an excellent publication record. You should be able to apply expertise for fundamental research and applications and show evidence of successful grant income and leadership. Job Ref: A-581613. Closing Date: 16 December 2013. <http://www.jobs.ac.uk/job/AHP082/lecturer-in-nuclear-physics-grade-7-8>



UNIVERSITY OF
LIVERPOOL

Assistant/Associate Professor Physics

Specialization: Bio-physics or bio-nanotechnology, high-resolution imaging of biomaterials; experimentalist preferred. Position #: 14-011

CRISP Center for Research on
Interface Structures & Phenomena

Brief Description of Duties/Responsibilities:

Teaching of introductory, upper and masters degree-level courses for physics and other science majors, and elementary core courses for other undergraduates; mentoring majors; scholarly research with strong potential for undergraduate and master's degree student participation including establishing a laboratory in a new science building now under construction (anticipated opening, spring 2015); scientific interaction with departmental faculty; participation in collegial service and professional activities. Successful candidate will be expected to help develop the recently established master's program in applied physics. Tenure-track faculty at SCSU are expected to conduct creative activity/research in their area of expertise. These activities include, but are not limited to, research leading to publication of books and/or articles in academic and professional journals, performances in the fine and performing arts, seeking funding in support of research and teaching needs, and contributing to workshops and conferences.

Required Qualifications: Ph.D. in physics, bio-physics, material science or closely related field and a demonstrated commitment to undergraduate education with evidence of teaching effectiveness and ability to perform research that potentially involves undergraduate and master's degree students, preferably in collaboration with current department faculty.

Preferred Qualifications: Primary interest in bio-materials physics or bio-nanotechnology, experimentalist preferred in the field of high resolution imaging of biomaterials using novel imaging technologies. Preference will be given to applicant committed to collaborating with one or more of the current faculty members. In addition to excellence in teaching, we value participation in the scientific community by faculty and students. Our department houses a significant component of an NSF-supported Materials Research Science and Engineering Center, in collaboration with Yale University [<http://www.crisp.yale.edu/>] and a Nanotechnology Center.

Application Process: Please submit letter of interest, curriculum vitae, letter describing professional goals and statement of teaching perspective and scholarly interests. Identify at least three references with e-mail addresses and phone numbers. Send materials to Dr. Christine Broadbridge, Chairperson, Department of Physics, Southern Connecticut State University, 501 Crescent St, New Haven, CT 06515 or e-mail to: physics@southernct.edu

In order for your application to be given full consideration, all materials must be received by January 15, 2014. Position will remain open until filled.

Harvard-MIT Postdoctoral Fellowship

A new Harvard-MIT Postdoctoral Fellowship for Future Faculty Leaders program is being launched, with an



Harvard College Observatory
Harvard-MIT Postdoctoral Fellowship

application deadline of February 1, 2014. We specifically seek individuals whose research will contribute to increasing diversity and inclusion in the fields of physics and astronomy. For more information and to apply see

<http://www.cfa.harvard.edu/opportunities/fellowships/harvard-mit/>.

2014 MIT Summer Research Program and Harvard

The 2014 MIT Summer Research Program for undergraduate students is now open for applications at <http://odge.mit.edu/undergraduate/msrp/apply/>. The application deadline is January 31, 2014.



MIT conference for undergraduates

Harvard and MIT are jointly hosting a 2.5-day conference for undergraduates with a focus on minority recruitment for graduate school, to be held March 13-15, 2014; the application deadline for students is December 7, 2013 and applications are made at the website <http://www.ivyplussymposium.com/>.



Laboratory Technician II (UCP 4) Department of Physics University of Connecticut

The Department of Physics is seeking a Laboratory Technician II (UCP 4). The successful applicant for the position will assist the teaching lab staff to maintain and operate the physics teaching laboratories and demonstration room and ensure the safety and security of these areas. Additional duties will include maintaining and upgrading equipment, developing new equipment under supervision, evaluating procedures for desired results, and assisting in the training and evaluating of teaching assistants and student labor. The successful applicant will be responsible for the operation of weekend labs and able to work on weekends and evenings. For information about the Physics Dept. please go to: <http://www.phys.uconn.edu/>.



Minimum Qualifications: Bachelor's degree in Physics or a related field, and 1-3 years' experience in teaching laboratory operations, or equivalent education and experience; sound knowledge of principles of and experience in experimental physics; ability to perform and explain lab procedures and edit manuals; knowledge of laboratory safety procedures; ability to perform tasks requiring manual dexterity and lift 40 lbs; and ability to work weekends and evenings.

Preferred Qualifications: Strong written and verbal communication skills; familiarity with science education research; experience with CAD; familiarity with Windows, Linux, standard office and analysis software, and microcomputer-based laboratory equipment; familiarity with PASCO proprietary hardware and software; ability to maintain and repair equipment similar in type and complexity to existing lab equipment; and demonstrated ability to work well with students, faculty and staff in a diverse environment.

The desired start date is December 1, 2013. Compensation commensurate with qualifications and experience. To apply please submit letter of application, resume, names and addresses of three references to: Husky Hire at <http://www.jobs.uconn.edu>. The University of Connecticut is an EEO/AA employer. We encourage applications from under-represented groups, including minorities, women, and people with disabilities. (Search # 2014260)

CRISP Research Experiences for Undergraduates

The CRISP Research Experiences for Undergraduates (REU) is supported by the [National Science Foundation \(NSF\)](#) as a [Materials Research Science and Engineering Center \(MRSEC\)](#)

program. The goal of the CRISP REU program is to offer high-quality, state-of-the-art research experiences, enrichment activities and professional development events to undergraduates. Current research topics range from thin film growth and characterization

to friction and manipulation at the atomic level with projects involving computation, simulation, fabrication, characterization and image processing. Materials systems included semiconductors, dielectrics, optical materials and bio-materials. **Program Dates** June 2 - July 28, 2014. **Application** Candidates must apply directly to the Yale SURF

program through the Leadership Alliance Summer Research-Early Identification Program starting November 01, 2013: <http://www.theleadershipalliance.org/Programs/SummerResearch/HowtoApply/tabid/303/Default.aspx>.

The entire application package, including two letters of recommendation and official transcript(s), must be received by February 01, 2014.



University of Massachusetts Lowell - tenure-track faculty in Experimental Nuclear Physics

The Department of Physics and Applied Physics at the University of Massachusetts Lowell invites applications for a tenure-track faculty appointment in Experimental Nuclear Physics at the assistant professor level, effective Fall 2014. The successful candidate will have a Ph.D. degree in nuclear physics or closely related discipline, a strong research record, an interest in teaching at both the undergraduate and graduate levels, and will be expected to develop an externally sponsored research program that would build on and complement existing research strengths and facilities. Our current research is in accelerator-based fundamental and applied nuclear science as well as in advanced detector development and digital signal processing. Research is carried out in collaboration with national laboratory and industry partners. Our on-campus facilities include a 5.5-MV Van de Graaff accelerator and a 1-MW research reactor.



A curriculum vita, list of publications, statement of research interests, and contact information of at least 3 references are required for consideration. Applications from minority and women candidates are especially encouraged. The University of Massachusetts Lowell is committed to increasing diversity in its faculty, staff, and student populations, as well as curriculum and support programs, while promoting an inclusive environment. We seek candidates who can contribute to that goal and encourage candidates to apply and to identify their strengths in these areas. Review of applications will begin Dec 1, 2013. To apply, please visit the online application portal at <http://www.uml.edu/jobs> for the position of Assistant Professor-Nuclear Physics.

UCLA Faculty Position in Theoretical and Computational Plasma Physics

University of California, Los Angeles - Faculty Position in Theoretical and Computational Plasma Physics

The Department of Physics and Astronomy at the University of California, Los Angeles invites applications for a tenured or tenure-track faculty position in theoretical/computational plasma physics, with an anticipated start date of July 1, 2014. Both junior-level and senior level candidates will be considered.

The UCLA Department of Physics and Astronomy has very active research programs in theoretical, computational, and experimental plasma physics which include particle-in-cell simulation, turbulence and transport in magnetized plasmas, laser-plasma interaction, plasma-based acceleration, magnetic reconnection, inertial and magnetic confinement fusion energy, high-energy density plasmas, and space plasmas. Outstanding candidates are sought with expertise in theory and simulation, and with the potential for exceptional research in frontier areas of plasma physics. The candidate is expected to develop a vibrant research program that complements existing programs, and to demonstrate teaching excellence at both undergraduate and graduate levels. The successful candidate should also have a clear commitment to enhancing the diversity of the faculty, graduate student population, and of the majors in physics and astronomy.

Candidates should submit a curriculum vita including a list of publications, a synopsis of educational goals, a statement of research interests, a list of at least five references via UCLA Academic Recruit

<https://recruit.apo.ucla.edu/apply/JPF00101>, and arrange to have a minimum of three letters of recommendation sent to the same address. The deadline is January 15, 2014; however the search will remain open until the position is filled.

The Department has a strong commitment to the achievement of excellence and diversity among its faculty and staff.

Assistant Professor in Theoretical Nuclear Physics - the University of Tennessee

The Department of Physics and Astronomy at the University of Tennessee (UT) invites applications for a tenure-track faculty position at the rank of Assistant Professor in the field of Theoretical Nuclear Physics. Candidates should have a PhD in



Physics or another field closely related to Physics. The candidate is expected to have a strong research record in Theoretical Nuclear Physics and is expected to develop a first-class, externally funded research program, to provide training for graduate students and postdoctoral researchers, and to contribute to the teaching mission of the department at both the undergraduate and graduate levels. A strong interest in interacting with ongoing research programs at UT, particularly in low-energy nuclear physics, is desirable. This appointment is expected to begin August 1, 2014. The areas of research in Nuclear Physics developed in the department include nuclear structure and reactions,

fundamental neutron physics, nuclear astrophysics, relativistic heavy ion collisions, as well as the use of state-of-the-art computational techniques. QUALIFICATIONS: Ph.D. in Physics or another field closely related to Physics Strong research record in Theoretical Nuclear Physics. APPLICATION INSTRUCTIONS: Applicants should create account and upload a CV, list of publications, a description of research and teaching experience, and of the proposed research program, and also arrange for at least three confidential letters of reference to be submitted via instructions in Interfolio. Only electronic applications will be considered and acceptable file formats are .pdf or .doc. Review of applications will begin on November 1, 2013 and continue until the position is filled. ONLINE APPLICATION <http://apply.interfolio.com/22685>

**California State University San Marcos Tenure track
Assistant Professor of physics**



California State University San Marcos has an opening for a tenure track assistant professor of physics to begin August 2014. Candidates must have a Ph.D. in physics, applied physics, or a closely related field. Successful candidates will have a demonstrated commitment to excellence in undergraduate teaching and be able to develop a research program that involves undergraduates. The preferred research area is biological physics or a related area such as medical physics, applied optics, acoustics, or soft condensed matter; however exceptional candidates in other research specialties will be considered. An interest in teaching undergraduate electronics courses is desirable. Preference will be given to applicants with demonstrated intercultural competence with diverse groups in teaching, research and/or service. The position is at the assistant professor level; however, under exceptional circumstances applicants at the untenured associate level may be considered. Applicants should submit a curriculum vitae, a one-page statement of teaching philosophy, a one-page statement of future research plans, and a completed [Faculty Application](#); and arrange for three letters of reference. Materials should be sent to: Physics Search Committee, PHYSTT@csusm.edu. To assure full consideration, all application materials should be received on or before 1/13/2014. However, applications will be accepted until a suitable candidate is found. CSUSM has been designated as a Hispanic Serving Institution (HSI) and an Asian American Native American Pacific Islander Serving Institution (AANAPISI) and was recently named one of the top 32 Colleges most friendly to junior faculty by the Collaborative on Academic Careers in Higher Education. For more information, please visit <http://www.csusm.edu/facultyopportunities>.

UCLA Faculty Position in Theoretical /Computational Biophysics

University of California, Los Angeles - Faculty Position in Theoretical/Computational Biophysics

The Department of Physics and Astronomy at UCLA invites applications for a tenure-track ladder faculty appointment in the area of Theoretical and/or Computational Biophysics, including - but not restricted to - physics of neuroscience, biological physics, physics of proteins, cellular biophysics, and physics of cancer, with an anticipated start date of July 1, 2014. A junior-level appointment is anticipated, but a more senior level appointment may be considered. The department is seeking outstanding candidates with the potential for exceptional research and excellence in teaching. A successful candidate should display a clear commitment to enhance the UCLA biophysics major and to broaden the diversity of the faculty, graduate student population, and of the majors in physics and astronomy. Candidates with wide-ranging interests and creative approaches to important problems are especially encouraged to apply. UCLA offers a wide spectrum of related disciplines in the Physical and Life Science, as well as facilities such as the Institute for Pure and Applied Mathematics and the California NanoSystems Institute. The successful candidate will have the potential to interact with scientists in other departments to conduct inter-disciplinary research.

Candidates should submit a curriculum vita, a statement of future research plans and teaching interests, and a list of publications via UCLA Academic Recruit <https://recruit.apo.ucla.edu/apply/JPF00098>, and arrange to have three letters of recommendation submitted to the same address. The deadline is January 15, 2014 however the search will remain open until the position is filled. The Department has a strong commitment to the achievement of excellence and diversity among its faculty and staff. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

DOE SCHOLARS PROGRAM – *Explore the Possibilities!*

Visit <http://orise.orau.gov/doescholars> for more information or to apply - deadline is January 12, 2014!

The DOE Scholars Program offers unique opportunities that introduce students or post-graduates to the agency's mission and operations. Participants in the DOE Scholars Program gain a competitive edge as they apply their education, talent and skills in a variety of scientific research settings within the DOE complex. Appointments are available in a variety of disciplines at participating DOE facilities nationwide.

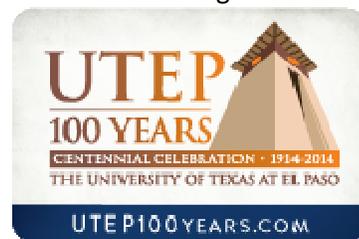
Being selected as a DOE Scholar offers the following benefits:

- Career possibilities with the nation's leading sponsor for scientific research
- Opportunities to learn from top scientists and subject matter experts
- Stipends of up to \$650 per week (depending on academic status)
- Travel arrangements to and from appointment site

Applicants must be US Citizens and undergraduates, graduates or post-graduates of an accredited college or university. The program is open to majors in: Engineering; Physical Sciences; Environmental Sciences; Computer Science and Information Technology; Physics; Business; Policy; Program Management; Mathematics; Statistics; Safety and Health; Accounting and Finance; Law; Communications; and other related areas. Want to learn more about the DOE Scholars program? E-mail doescholars@orise.orau.gov or visit <http://orise.orau.gov/doescholars>.

Tenure-track Assistant Professor position in Physics University of Texas at El Paso

The Department of Physics at the University of Texas at El Paso (UTEP) invites applications from outstanding candidates with expertise in experimental condensed matter physics for a tenure-track Assistant Professor position. The areas of interest include, but are not limited to, functional nano- and bio-materials. Potential application of such research and any composites/materials associated with it should preferably reside in areas such as renewable energy, energy conversion and storage, and biomedicine. Candidates with an established record of publications and strong potential for a successful, independent, externally-funded research program to complement and expand departmental experimental research are encouraged to apply. Interested applicants must hold a Ph.D. in physics or a closely related area; have postdoctoral experience; be able to teach physics courses at the undergraduate and graduate levels; and demonstrate a commitment to student mentoring. To apply, candidates should submit: 1) a curriculum vita, 2) a statement of research plan, 3) a teaching philosophy, and 4) complete contact information for at least three references. Applications must be submitted electronically as a single PDF attachment with the subject line "Physics Experimentalist Search" to: physicssearch@utep.edu, Physics Search Committee. Review of applications will begin immediately and will continue until the position is filled. **Please visit <http://www.utep.edu/employment> to view a full position description.**



Summer Research Experience for Undergraduates at Northwestern University

The Materials Research Science and Engineering Center (MRSEC) at Northwestern University offers a 9-week, paid summer research experience for undergraduates. The students are paired up with some of the leading research professors in science and engineering fields. Research areas include nanocomposites, photonics, nanoparticles, molecular electronics, and biomaterials. While there are many REU programs, the NU-MRSEC stands out in offering students a truly interdisciplinary research experience. Students currently pursuing an undergraduate degree in science or engineering who are US citizens or permanent residents are eligible. The program dates for summer 2014 will be June 23 through August 22; applications are due Feb. 15, 2014. Participants are paid a \$4500 stipend and a travel allowance and on-campus housing is provided. For more information or to apply, please visit our website:



http://www.mrsec.northwestern.edu/content/educational_programs/reu.htm

If you have any questions, please contact us at mrc-reu@northwestern.edu



U.S. DEPARTMENT OF
ENERGY

Office of
Science

Science Undergraduate Laboratory Internship (SULI) at Oak Ridge National Laboratory (ORNL)!

2014 Summer Internship Information – Apply now!!

ORNL is the largest science and energy laboratory in the Department of Energy system. Areas of research include materials, neutron sciences, energy, high-performance computing, systems biology and national security. Visit <http://www.youtube.com/watch?v=NSCdUJ8caww> to discover some exciting reasons why ORNL offers a great internship experience!

Benefits:

- 10 weeks (June 2 – August 8) engaged in a research project under the direction of a laboratory scientist/engineer
- Career development workshops/lab tours
- \$500 per week stipend and limited travel reimbursement/housing allowance (for those who qualify)

To be eligible, you must:

- Be currently enrolled full-time at an accredited U.S. institution **AND** have completed at least one year as an undergraduate (at the time of application)*
- Be at least 18 years of age
- Be a U.S. Citizen or Legal Permanent Resident
- Have a minimum GPA of 3.0

**Please note – the internship requires a full-time (at least 40 hours per week) commitment onsite at ORNL in Oak Ridge, Tennessee. Some students find it reasonable to take online or evening classes during the course of the internship. Undergraduate credits obtained in high school cannot be applied to meet the minimum one-year completion requirement.*

Application deadline: January 10, 2014 5:00 p.m. EST

Apply online now at [http://science.energy.gov/wdts/!](http://science.energy.gov/wdts/)

Email suli@ornl.gov for questions or additional information.

www.ornl.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. <http://www.hispanicphysicists.org/>.