

The Hispanic Physicist

The Newsletter of the National Society of Hispanic Physicists

Year 17

August 4, 2014

NSHP hosts Science Café: Cosmos

Join the NSHP as we host Science Cafe at **SACNAS 2014** (Oct. 16-18, 2014). A science cafe is a way for people to informally meet, discuss and learn in a casual and informal setting. Rather than a lecture we will have coffee and chat about the TV series "Cosmos" and the related ideas from the subjects of astronomy and cosmology. Everyone is welcome. **See you there!**



NSHP Communication Officer wins the 2014 Mentoring Award of the Division of Nuclear Physics

The Division of Nuclear Physics of the American Physical Society, through the DNP Chair, Ani Aprahamian, announced that Jorge Lopez, NSHP Communication Officer and Schumaker Professor of Physics of the University of Texas at El Paso, had been selected to receive the 2014 Mentoring Award of the DNP.

The Division of Nuclear Physics Mentoring Award is intended to recognize Division of Nuclear Physics members who have had an exceptional impact as mentors of nuclear scientists and students through teaching or research or science-related activities.

In Lopez's case the citation reads:

"For his outstanding record of mentoring undergraduate and graduate students in nuclear physics research, particularly students from traditionally under-represented backgrounds, many of whom have continued their studies to receive advanced degrees in nuclear physics, and for his leadership in the National Society of Hispanic Physicists."

The award and certificate will be issued at the upcoming DNP Business Meeting at the 4th Joint Meeting of the APS Division of Nuclear Physics and the Physical Society of Japan, October 7-11, 2014 in Kona, Hawaii.

Congratulations to me!



Lopez at the Lawrence Berkeley National Laboratory wearing the wrong shirt.

Two Faculty Fellowships

1. The Greater Texas Foundation Faculty Fellowship Program, \$30,000 / year for three years. Purpose: to build research and teaching capacity for Texas faculty working in areas related to the foundation's mission and strategy, visit: www.greatertexasfoundation.org and click on the "GTF Fellows" Tab.
2. The Fellows Program at the Penn Center for Minority Serving Institutions, \$5,000 one-time stipend + travel, room & board for one of the center's national convenings, and dissemination of the scholar's work. Purpose: to support the scholarship of academics who focus their work on Minority Serving Institutions, www2.gse.upenn.edu/cmsi/support/fellow

AFOSR Young Investigator Program

The Air Force Office of Scientific Research (AFOSR) Young Investigator Research Program (YIP) supports young scientists and engineers in Air Force relevant disciplines and is designed to promote innovative research in science and engineering. The awards foster creative basic research in science and engineering, enhance early career development of outstanding young investigators, and increase opportunities to recognize Air Force mission and challenges in science and engineering. AFOSR is seeking unclassified proposals addressing the research areas of interest for the Air Force Research Laboratory. The basic research areas of current interest are available on-line in the current AFOSR BAA (BAA-AFOSR-2014-0001): <http://www.grants.gov/web/grants/view-opportunity.html?oppld=252028>.



Eligible applicants include U.S. citizens, nationals, or permanent residents who have received Ph.D. or equivalent degrees in the last five years (on or after 1 May 2009) and who show exceptional ability and promise for conducting basic research. Anticipated Number of Awards: 40. Anticipated Award Amount: Approximately \$120,000 a year for three years. **Deadline: September 15, 2014.** Link: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=258075>.

Indiana University Recruitment Program "Getting You into IU" for underrepresented PhD and MFA students



INDIANA UNIVERSITY BLOOMINGTON

The Indiana University Graduate School would like to make you aware of our fall recruitment program, "Getting You into IU" for prospective underrepresented and minority PhD and MFA students interested in **Fall 2015 admission** to Indiana University Bloomington (IUB). The event begins on Sunday October 12, 2014 and ends on October 14th. Indiana University Graduate School will provide all travel, lodging, and meals for visiting participants selected for this program. Completed applications to participate must be submitted by **September 5, 2014**. See the attached document for more information. If you have any questions about the program, please respond to this email. More information can also be found at <http://graduate.indiana.edu/campus-visit.php>.

Marion Milligan Mason Award for Women in the Chemical Sciences.

The objective of the Mason Award is to kick-start the research career of promising future senior investigators in the chemical sciences. The Marion Milligan Mason Fund will provide three grants of \$50,000 every other year to women researchers engaged in basic research in the chemical sciences. Awards are for women who are starting their academic research careers. In addition to research funding, the program will provide leadership development and mentoring opportunities. Applicants must have a "full-time" career-track appointment. More than one applicant from the same institution can apply for this award, provided that each application is scientifically distinct. Proposals are due Monday, September 15, 2014, midnight Eastern Daylight Time (EDT). Proposals should be submitted via the online application system at <https://masonaward.aaas.org>. If you have questions, please e-mail masonaward@aaas.org.



The Alfred P. Sloan Foundation Research Fellowships

The Alfred P. Sloan Foundation is now accepting nominations for Sloan Research Fellowships. These two-year, \$50,000 fellowships are awarded annually to 126 early-career faculty in recognition of their distinguished performance and exceptional potential as researchers. Candidates must be nominated by a department head or other senior researcher, and are selected by independent panels of noted scholars in each field.



To be eligible:

- Candidates must hold a tenure track (or equivalent) position at a college, university, or other degree-granting institution in the United States or Canada. Tenure track faculty positions at the candidate's institution must include a yearly teaching requirement;
- Candidates must hold a Ph.D. (or equivalent) in chemistry, computational or evolutionary molecular biology, computer science, economics, mathematics, neuroscience, ocean sciences, physics, or a related field;
- Candidate's most recent Ph.D. (or equivalent) must have been awarded on or after September 1, 2008.

Nominations and other supporting material are due online **no later than September 15, 2014**. For more information, please visit <http://www.sloan.org/sloan-research-fellowships/> or contact researchfellows@sloan.org.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

DIRECTOR, PHYSICAL MEASUREMENT LABORATORY



The National Institute of Standards and Technology (NIST), Gaithersburg, Maryland, is seeking a highly qualified individual to lead its Physical Measurement Laboratory. U.S. citizenship is required. Primary facilities are located in Gaithersburg, Maryland and Boulder, Colorado; Additional sites in Fort Collins, Colorado and Kauai, Hawaii support the time and frequency Radio Stations. Salary Range: \$120,749 – \$181,500.

The incumbent serves as the Director of the NIST Physical Measurement Laboratory (PML), a major organizational unit within NIST. PML is focused on realizing and disseminating the national standards for length, mass, time and frequency, electricity, temperature, force, acceleration, pressure and vacuum, flow, acoustical pressure, and microwave, optical, and ionizing radiation through activities ranging from fundamental research in measurement science to provision of measurement services and standards. PML has a budget of ~\$200M and a staff consisting of 525 employees and over 700 associates.

The Director represents NIST and the Department of Commerce, both personally and through appropriate delegation of staff, on various scientific and advisory committees, both governmental and non-governmental, at the national, interagency, inter-laboratory, and international level. The Director is also responsible for the development and implementation of the Laboratory's administrative policies and procedures. Additional information regarding NIST and its programs may be found at <http://www.nist.gov>. For information or to apply for this position, visit website <https://www.usajobs.gov> vacancy number SES-2014-0036. The Department of Commerce/NIST is an Equal Opportunity Employer. Open Period: July 7, 2014 – August 7, 2014.

University of Missouri – St. Louis Department of Physics and Astronomy



The Department of Physics and Astronomy at the University of Missouri – St. Louis invites applications for a full-time, annual appointment, non-tenure track Assistant Teaching Professor position. Successful candidates are expected to teach physics and astronomy courses the undergraduate level, as well as general education courses, and engage in department/university service. An M.S. degree or Ph.D. (preferred) in physics or a closely related field and teaching experience at the undergraduate level are required. Experience with on-line instruction is preferred.

Complete applications must include (a) a letter of application; (b) a detailed curriculum vitae; (c) names and contact information of at least three professional references; (d) copies of transcripts for the highest degree held; and (e) a one-page teaching statement that includes a description of prior teaching effectiveness and use of computers in classroom and on-line instruction. Candidates must submit application materials electronically at https://myhr.umssystem.edu/psp/prd/EMPLOYEE/HRMS/c/HRS_HRAM_EMP.HRS_CE.GBL?FolderPath=PORTAL_ROOT_OBJECT.CO_EMPLOYEE_SELF_SERVICE.HC_HRS_EE_SELF_SERVICE_GBL.HC_HRS_CE_GBL&IsFolder=false&IgnoreParamTempl=FolderPath%2cIsFolder (Job #13209). Review of applications will begin September 1, 2014. For questions, contact the search committee chair: gibbe@umsl.edu. Salary: 40,000.00 - 50,000.00.



U.S. DEPARTMENT OF
ENERGY

Office of
Science

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

2015 Spring 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:

- 16 weeks (January 5 – April 24) 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: October 7, 2014 5:00 p.m. ET

Apply online now at <http://science.energy.gov/wdts/suli/>!

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

www.ornl.gov

Administered by ORAU through the Oak Ridge Institute for Science and Education

University of Maryland, Baltimore County: Lecturer in Physics

The Department of Physics invites applications for the long-term, non-tenure track appointment of up to two positions at the rank of Lecturer beginning Spring or Fall 2015. Exceptionally well-qualified candidates with over 6 years of full-time teaching experience may be considered for appointment as Senior Lecturer. The successful candidates will teach, primarily, the non-calculus and calculus-based introductory physics courses offered by the department, including the honors sections. The successful candidates will supervise and train the teaching assistants assigned to these courses and manage the resources of the Physics Tutorial Center. They will also participate in curriculum development of these, and other, new introductory-level physics courses and will provide general departmental and university service. We especially seek candidates with an interest in research-based curricular materials and methods. Although not required, individuals with an interest in developing introductory physics courses for life scientists are encouraged to apply. Applicants must have a Ph.D. in Physics or a closely-related field. The nine-month salary will be competitive and can be supplemented with additional teaching in the summer program.

UMBC

The Physics department currently consists of 19 tenure-track and 15 research faculty, over 45 graduate students and 150 majors. The department offers a BS in Physics, a BA in Physics for Secondary Education, an Astronomy minor, and both MS and Ph.D. degrees in Physics and in Atmospheric Physics. Research expenditures currently exceed \$6M per year. (For more information see: <http://physics.umbc.edu>). UMBC is frequently cited as one of the country's most innovative colleges and universities. To apply, send an application letter, a curriculum vitae, a brief statement of teaching experience and interests and the names and contact information of at least three references in a single PDF file to the Chair of the Search Committee at Physics@umbc.edu. The selection process will begin September 15, 2014 and will continue until the positions are filled.

The department is especially interested in candidates who can contribute to the diversity and excellence of the UMBC community. UMBC is an affirmative action/equal opportunity employer.

**AVS 61ST INTERNATIONAL
SYMPOSIUM & EXHIBITION**
November 9-14, 2014 ↔ Baltimore, Maryland
Baltimore Convention Center



The AVS International Symposium and Exhibition addresses cutting-edge issues associated with materials, processing, and interfaces in both the research and manufacturing communities. The weeklong Symposium fosters a multidisciplinary environment that cuts across traditional boundaries between disciplines, featuring papers from AVS technical divisions, technology groups, and focus topics on emerging technologies. The equipment exhibition is one of the largest in the world and provides an excellent opportunity to view the latest products and services offered by over 200 participating companies. More than 2,000 scientists and engineers gather from around the world to attend.

Short courses are offered in conjunction with the International Symposium providing specialized training in specific areas of vacuum science and related technologies. The Symposium also provides a Career Center available to all attendees. The Career Center covers such topics as résumé preparation, job search skills, networking, interviewing skills, and more. The Career Center provides the opportunity for job seekers to submit their résumés and meet with potential employers. Other symposia features include Tutorials, Professional Leadership opportunities and several related workshops.

Registered AVS attendees are invited to visit the exhibit which comprises an extensive display of tools, equipment, services and consulting for film deposition, surface and interface measurements and analysis, materials, chemicals,

supplies, vacuum production and measurement, and related instrumentation for surface, interface and film measurements, as well as professional literature and publications in these topics.

In addition, consultants, engineers, biologists, chemists, physicists, purchasing professionals, scientists, students, technicians, and exhibitor staff working or studying in the fields of applied surface science, biomaterial interfaces, electronic materials and processing, magnetic interfaces, manufacturing science, MEMS/NEMS, nanoscience, thin film, plasma science, surface science, or vacuum technology are welcome to pre-register for the AVS Exhibition for FREE.

<https://www.avs.org/symposium>

Rotator opportunities NSF Division of Materials Research



As diversity leaders in our community, we would appreciate your spreading the word about opportunities for rotators in the Division of Materials Research. The ads can be seen at www.nsf.gov/materials under the banner for employment opportunities. We are especially searching for candidates in biomaterials and in soft matter theory, but others may apply as well. The procedure is simply to send an email and cv to dmr-recruit@nsf.gov. Any questions, please call our director Mary Galvin at 703-292-8562 or mgalvind@nsf.gov. Contact: Janice M. Hicks, Deputy Division Director, Division of Materials Research, National Science Foundation, 703-292-4956, jhicks@nsf.gov

U.S. DEPARTMENT OF ENERGY Office of Climate, Environment, and Energy Efficiency **EPSA FELLOWSHIP PROGRAM**

Now Accepting Applications for BS, MS or PhD Graduates and recent Alumni (within the last 5 years) in Physical Sciences, Environmental Sciences, Environmental Policy, Public Policy, Economics or related degrees. Application closes Monday, September 1, 2014, midnight EST – visit <http://orise.orau.gov/epsa> to get started NOW!

Opportunity in Washington, DC for a full-time, one-year or more commitment, starting in September or October 2014 to conduct climate/environmental research. Applicant must be interested in a multi-disciplinary, fast-paced environment focused on energy and climate policy. Prefer expertise in one or more major energy sector (e.g. electricity, oil, gas) with training/experience in climate science, climate impacts or other environmental areas. Strong quantitative analytical, research and communication skills are required. Experience with modeling and managing data outputs from models preferred. Applicants must be U.S. Citizens. Annual stipends are dependent on academic level, skills and experience. Additional allowances for travel to site, medical insurance or housing may be provided. **For more information, e-mail epsa.fellowship@orau.org.**



Office of
Science

DOE Office of Science Graduate
Student Research (SCGSR) Program

The Department of Energy's (DOE) Office of Science is pleased to announce that the Office of Science Graduate Student Research (SCGSR) program is now accepting applications for the 2014 solicitation. **Applications are due 5:00pm ET on Wednesday September 24, 2014.** The SCGSR program supports supplemental awards to outstanding U.S. graduate students to conduct part of their graduate thesis research at a DOE national laboratory in collaboration with a DOE laboratory scientist for a period of 3 to 12 consecutive months—with the goal of preparing graduate students for scientific and technical careers critically important to the DOE Office of Science mission.

The SCGSR program is open to current Ph.D. students in qualified graduate programs at accredited U.S. academic institutions, who are conducting their graduate thesis research in targeted areas of importance to the DOE Office of Science. 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 supplemental award provides for additional, incremental costs for living and travel expenses directly associated with conducting the SCGSR research project at the DOE host laboratory during the award period.

The Office of Science expects to make approximately 100 awards in 2014, for project periods beginning anytime between January and September 2015. Detailed information about the program, including eligibility requirements and access to the online application system, can be found at: <http://science.energy.gov/wdts/scgsr/>. The SCGSR program is sponsored and managed by the DOE Office of Science's Office of Workforce Development for Teachers and Scientists (WDTS), in collaboration with the six Office of Science research programs offices and the DOE national laboratories, and the Oak Ridge Institute of Science and Education (ORISE). For any questions, please contact the SCGSR Program Manager, Dr. Ping Ge, at sc.scgsr@science.doe.gov.

Electrical Staff Engineer at BNL



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 Collider-Accelerator Department currently has a full time opportunity for an Electrical Staff Engineer. The mission of the Collider-Accelerator (C-A) Department is to develop, improve and operate the suite of particle/heavy ion accelerators used to carry out the program of accelerator-based experiments at BNL; to support the experimental program including design, construction and operation of the beam transports to the experiments plus support of detector and research needs of the experiments; to design and construct new accelerator facilities in support of the BNL and national missions. The Department performs all these functions in an environmentally responsible and safe manner under a rigorous conduct of operations approach.

Job Description: Will work with a variety of technologies ranging from PLC systems and software, relay logic systems, electronic circuit design, biometrics and gas sensor technologies. The Access Controls Group is responsible for operation and upgrade of PLC based personnel safety systems for the RHIC complex of particle accelerators, the Energy Recovery Linac, and other existing and planned accelerator systems.

Required Knowledge, Skills and Abilities: Requires a Bachelors degree in electrical engineering with 3 years' relevant experience; Use of CAD design tools for electronic design; Knowledge of digital and analog electronic circuits; Knowledge of circuit and system test instruments; Working knowledge of fabrication and wiring techniques; Excellent communication skills; Able to support team with diverse skills and talents during all phases of construction, testing, repair and upgrade of existing equipment, and operations support

Preferred Knowledge, Skills, and Abilities: MS degree in electrical engineering and up to 5 years' relevant experience; Prior experience with PL based safety systems; PLC programming experience; Cable installation field experience; Design and diagnostic experience with relay-based logic systems

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 sort by job ID and apply to job # 16676. Brookhaven National Laboratory (BNL) is an equal opportunity employer committed to ensuring that all qualified applicants receive consideration for employment and will not be discriminated against on the basis of race, color, religion, sex, sexual orientation, national origin, age, disability, or protected veteran status. BNL takes affirmative action in support of its policy and to advance in employment individuals who are minorities, women, protected veterans, and individuals with disabilities.

EXPERIMENTAL NUCLEAR PHYSICS TEXAS A&M UNIVERSITY

The Physics and Astronomy Department at Texas A&M University seeks applications for a tenure-track assistant professor position in experimental nuclear physics under the auspices of the Nuclear Solutions Institute. This institute combines basic and applied nuclear science with nuclear security technology and policy; it already encompasses a broad spectrum of faculty members drawn from across the university. A selected candidate must hold an earned Ph.D. in physics or a related area. The appointment is expected to begin on or before September 1, 2015.

The successful candidate for this position will assume a tenure-track position in the Department of Physics and Astronomy with a joint appointment in the Cyclotron Institute and the Nuclear Solutions Institute. More senior candidates may be considered at the associate professor or professor level. He/she is expected to assume full teaching responsibilities at the graduate and undergraduate levels and is also expected to conduct a vigorous research program based at the Cyclotron Institute and employing the facilities there, which include two cyclotrons – a newly refurbished K150 and a superconducting K500 – together with a wide variety of modern experimental equipment. An upgrade project, nearing completion, will utilize the two accelerators to make radioactive beams available to all target locations.

Each application should include:

- a cover letter specifying that the application is for the nuclear physics position,
- a *curriculum vita*,
- a list of publications,
- a description of future research plans,
- a teaching statement, and
- the names, addresses, telephone numbers, and e-mail addresses of at least three references.

Application packages should be submitted by e-mail to facultysearch@physics.tamu.edu (in pdf or Word formatted attachments), or by regular mail to:

Nuclear Search Committee (Walker)
Texas A&M University
Department of Physics and Astronomy
4242 TAMU
College Station, Texas 77843-4242

APPLICATION REVIEW WILL BEGIN ON OCTOBER 1, 2014, AND CONTINUE UNTIL THE POSITION IS FILLED.

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/>.