Looking for a Postdoctoral Position in Nuclear Physics

David Edwin Alvarez Castillo obtained a Ph.D. at the Institute of Nuclear Physics, Polish Academy of Sciences PAN, Kraków, Poland in 2012 and has been postdoc’ing both at the Institute of Theoretical, Physics of Wrocław University in Poland (July 2012 - March 2013) and at the Joint Institute for Nuclear Research in Dubna, Russia (since April 2013). His background and current research interests are neutron rich nuclear matter, symmetry energy, neutron stars, etc. David has published over 20 articles and has delivered talks in many conferences; his CV is attached.

David is looking for a postdoctoral or academic position in a related area, if you are interested please contact him at sculkaputz@gmail.com.

The NRAO has conducted a summer student research program since 1959, with over 930 participants to date. Each NRAO summer student conducts research under the supervision of an NRAO staff member at one of three NRAO sites, on a project in the supervisor's area of expertise. The project may involve any aspect of astronomy, including original research, instrumentation, telescope design, astronomical site evaluation or astronomical software development. Often, these projects result in publications in scientific journals. This program is open to both undergraduate and graduate students. The NAC and PING programs in particular targets URM groups, this year there will be one NAC cohort group at the VLA in New Mexico. Link to programs: https://science.nrao.edu/opportunities/student-programs/

APPLICATION DEADLINE IS FEBRUARY 2
Research Experiences for Undergraduates 2015

The Department of Astronomy of Cornell University is pleased to announce its 2015 Research Experiences for Undergraduates. We would appreciate it very much if you could post the attached poster in an area of high undergraduate traffic and forward it or otherwise distribute it as appropriate. The list of projects available and the online application are at http://astro.cornell.edu/specialprograms/reu/. Contact: Patricia Fernández de Castro, pf46@cornell.edu.

Yale University

Center for Research on Interface Structures and Phenomena (CRISP)

CRISP Research Experiences for Undergraduates

Program dates: June 1 - July 27, 2015

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 CRISP REU fellowship program provides students with the opportunity to conduct team-based interdisciplinary materials research through both academic year and summer research opportunities for undergraduate students - academic yearREUs are available for students at Yale and SCSU. During the course of this eight-week summer research program, REU Fellows conduct research under the advisement of a university faculty mentor and postdoctoral fellows and graduate students within the research group. The REU experience is based on a very successful collaborative team-based model developed as one of CRISP’s signature programs (MIMER). Specifically, a team of researchers with various academic backgrounds are brought together to research a topic of common interest. These teams make use of shared research/teaching facilities at both Yale and SCSU. These collaborative research groups encourage synergy and foster the formation of mentoring relationships among team members who are recruited broadly with an emphasis on underrepresented populations.

Eligibility - the CRISP REU program is open to highly motivated undergraduate students who have completed their junior year, although consideration is given to underclassmen demonstrating strong potential. Minorities, women and persons with disabilities are strongly encouraged to apply. US citizenship [or permanent residency] is required.

REU Fellow Selection - the selection of REU participants is based on a personal statement, academic transcript, resume and two letters of recommendation. Selection is based on the candidate’s motivation, promise for success, and the potential for CRISP to positively impact the student's abilities and interest in obtaining a graduate degree in the sciences; we especially target student’s from smaller undergraduate institutions where state-of-the art research is not readily accessible.

Application Candidates must apply directly to the Yale SURF program through the Leadership Alliance Summer Research-Early Identification Program starting November 01, 2014. Students must also complete the supplementary application for CRISP to indicate interest. The entire application package, including two letters of recommendation and official transcript(s), must be received by February 01, 2015.

REU program at the University of Alabama at Birmingham
The focus is on Experimental and Computational Materials Research. The program website is https://www.uab.edu/cnmb/research-experiences-for-undergraduates/application-process. The program dates are May 17 to Jul 25, 2015. The application deadline is April 1, 2015, but you should consider getting your documentation in place early, including securing letters of recommendation from faculty. Decisions will be made no later than April 15, 2015. The research projects include, but are not limited to, electronic materials, nanomaterials, lasers and optical materials, biosensors, biophysics & biomaterials, computational materials, biomedical research and materials under pressure." The REU program will pay a $5,000 stipend for the ten weeks period, plus additional support for housing, travel and other expenses. If you have questions about logistics, housing, and travel arrangements, please contact Charita Cadenhead <charita@uab.edu> or by phone at (205)975-8076.

Faculty position in experimental nuclear physics
The Department of Physics at Central Michigan University (CMU) invites applications for one tenure-track faculty position in experimental nuclear physics in areas of research important to the DoE Facility for Rare Isotope Beams (FRIB). The position includes the possibility of summer support for collaborative research from the National Superconducting Cyclotron Laboratory (NSCL) at Michigan State University. The search is intended to attract an outstanding scientist who will develop and maintain an active, externally funded research program and assume a leading role in the development of an FRIB based research program. More information can be found in the attached pdf file and at the following website: http://www.jobs.cmich.edu

Northwestern University Materials Research Science and Engineering Center
Summer Research Experience for Undergraduates (REU)
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 ceramics, polymers, nanocomposites, photonics, nanoparticles, molecular electronics and biomaterials. While there are many REU programs, the NU-MRSEC stands out in offering students an 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 this year are June 22 to August 21, 2015; Applications are due Feb. 15, 2015. Participants are paid a $4500 stipend, a travel allowance, and on-campus housing is provided. If you have any questions, please contact us at mrc-reu@northwestern.edu, for more information, please visit our website: http://www.mrsec.northwestern.edu/content/educational_programs/reu.htm
SLAC National Accelerator Laboratory is seeking an Associate Staff Scientist or Staff Scientist to join the Coherent X-ray imaging Department of the Linac Coherent Light Source (LCLS) Directorate. LCLS the world's first hard x-ray free electron laser is ideal to study ultrafast processes in matter and utilize the femtosecond x-ray pulses for structural biology studies beyond the classical x-ray pulse tolerance limit. The Associate Staff Scientist or Staff Scientist will be a member of the Science, Research & Development (SRD) Division, whose mission is to ensure the success of experiments at the LCLS by operating, maintaining and upgrading the instrumentation. The successful candidate will become a member of the Coherent X-ray Imaging department and be involved in every day experiments as well as potential development of new instrumentation. Depending on interests and capabilities, the candidate could play a lead role in developing analysis tools for general purpose research or dedicated to structural biology, or lead the development of a new beamline at LCLS. The candidate will also have the opportunity to engage in other related scientific research efforts and develop new scientific objectives. More information: [https://ch.tbe.taleo.net/CH12/ats/careers/requisition.jsp?org=SLAC&cws=1&rid=1547](https://ch.tbe.taleo.net/CH12/ats/careers/requisition.jsp?org=SLAC&cws=1&rid=1547)

**LCLS Laser Staff Scientist- Associate**

SLAC National Accelerator Laboratory is looking for a scientist to take responsibility for laser operations to meet the requirements of the LCLS scientific program, to improve and enhance laser operations at LCLS, and to conduct independent scientific research. Responsibilities include: Operate, maintain, and develop laser systems, diagnostics, and optical beam transport systems in support of the LCLS scientific mission; Work with LCLS instrument scientists to assist external and in-house users of the LCLS with the planning and execution of LCLS experiments; Participate in projects to improve the capabilities and efficient operations of the LCLS laser program; Conduct and publish original scientific research.[https://ch.tbe.taleo.net/CH12/ats/careers/requisition.jsp?org=SLAC&cws=1&rid=1482](https://ch.tbe.taleo.net/CH12/ats/careers/requisition.jsp?org=SLAC&cws=1&rid=1482)

**Associate Staff Scientist/Staff Scientist**

The Particle Physics and Astrophysics (PPA) Directorate of the SLAC National Accelerator Laboratory is seeking an experimental/observational cosmologist for an Associate Staff Scientist or Staff Scientist position to work on dark energy research relating to the Large Synoptic Survey Telescope (LSST). LSST is a new, large aperture, wide-field, ground-based facility designed to survey the entire southern sky down to faint magnitudes. LSST will measure the properties of billions of galaxies and large samples of Type 1a supernovae, which will collectively enable multiple probes of dark energy. Formal construction of the facility has begun, with the onset of operations expected in late 2022. The successful candidate will have an established record of accomplishment in one or more areas of dark energy research. He or she will be expected to play a leading role in developing the LSST dark energy science program at SLAC, and in building a coherent community in this field at the Laboratory. [https://ch.tbe.taleo.net/CH12/ats/careers/requisition.jsp?org=SLAC&cws=1&rid=1527](https://ch.tbe.taleo.net/CH12/ats/careers/requisition.jsp?org=SLAC&cws=1&rid=1527)

**Staff Scientist- Associate (AD Free-Electron Laser)**

SLAC National Accelerator Laboratory has an employment opportunity for an Associate Staff Scientist who has demonstrated capability and achievement in accelerator operation and research. Reporting to the Accelerator Directorates' Research and Development, Free-Electron Laser and Beam Physics Department Head, this responsibilities for this position include: Support the Linac Coherent Light
Source (LCLS), the world's first x-ray free-electron laser (FEL), producing ultra-fast pulses of coherent x-rays by operating, maintaining and upgrading the instrumentation, while performing cutting-edge research; Develop Free-Electron Laser (FEL) theory, simulations and experiments relevant to ultrafast electron and x-ray generation at LCLS and future light sources, such as LCLS-II; Create new concepts such as seeding and two-color scheme to enhance the capability and performance for the future FEL facilities; Conceive, plan and perform experiments in x-ray free-electronic laser to advance the frontier of the FEL physics.


**Physicist-Engineer (Innovative RF [Radio Frequency] Source Development)**
The Electrodynamics Department (ED) in the SLAC RF Accelerator Research & Engineering (RFARE) Division is expanding its capability in advanced high-power electrodynamics, which includes extending the frequency reach to the Terahertz regime. The Department is seeking Physicist-Engineer with outstanding research experience in RF source and accelerator science and technology and the vision to transcend contemporary limitations. The individual will develop and lead innovative millimeter and THz source and RF accelerator development projects; conceptualization, proposal formulation, technical demonstration and refinement, towards the ultimate goal of innovative technology that can address scientific and industrial needs and provide solutions for challenging applications for Department of Energy (DOE) and other federal agencies. This position will report to the RFARED Electrodynamics Department Head.


**Engineering Technology and Project Coordinator**
SLAC National Accelerator Laboratory seeks an Engineering Technology and Project Coordinator for the Instrumentation and Controls Division Engineering Support Department in the Accelerator Directorate. The Instrumentation and Controls Division supports the laboratory's research in high-energy physics and ultra-fast ultra-small science by developing integrated hardware/software controls and safety system solutions. The Technology and Project Coordinator is expected to achieve and maintain required qualifications to operate safely under SLAC's Integrated Safety Management System program. Additionally, this position will collaborate with Engineers within the Accelerator Directorate, and interact with other SLAC departments, DOE labs, and the international accelerator community. This position reports to the Engineering Support Department Head within the Instrumentation and Controls Division in the Accelerator Directorate of SLAC.

[https://ch.tbe.taleo.net/CH12/ats/careers/requisition.jsp?org=SLAC&cws=1&rid=1536](https://ch.tbe.taleo.net/CH12/ats/careers/requisition.jsp?org=SLAC&cws=1&rid=1536)

**Environment, Safety and Health Director**
SLAC National Accelerator Laboratory seeks a Director for Environment, Safety and Health (ES&H) to be responsible for all aspects of the intellectual leadership and management of SLAC's ES&H division whose mission is to ensure the Laboratory has and implements an excellent program in safety, health, environmental protection, and security. The ES&H Director also serves as the Chief Safety Officer and advises the Laboratory Director and Deputy Laboratory Director on elements of ES&H risk identification, mitigation and proactive solution(s). The ES&H Director represents SLAC's environmental, safety, and health programs to SLAC, Stanford University, the general public, the Department of Energy, other DOE laboratories, and concerned regulatory agencies.

[https://ch.tbe.taleo.net/CH12/ats/careers/requisition.jsp?org=SLAC&cws=1&rid=1562](https://ch.tbe.taleo.net/CH12/ats/careers/requisition.jsp?org=SLAC&cws=1&rid=1562)
The Physics of Atomic Nuclei (PAN) free residential summer program for science teachers and high school students is now accepting applications for summer 2015. PAN participants will learn about scientific research in nuclear astrophysics through conducting their own experiments, as well as the impact of nuclear science and its applications for society. Teachers can earn continuing education credit for participation. The teacher program will run from July 19 –24 at Michigan State University, and student programs will run from June 21-26 at University of Notre Dame and July 26-31 at Michigan State University. Applications are due by April 6. To learn more and fill out an online application, visit [http://www.jinaweb.org/outreach/PAN/](http://www.jinaweb.org/outreach/PAN/)

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**TCU REU 2015**

[www.phys.tcu.edu/reu_program.asp](http://www.phys.tcu.edu/reu_program.asp)

**Research Experience for Undergraduates**

As a participant in the 2015 REU program in Physics and Astronomy at TCU, funded by the National Science Foundation, you will:

- **Collaborate** on a research project with TCU faculty mentors, graduate students and other students.
- **Learn** about working in the aerospace industry through behind-the-scenes field trips.
- **Develop** skills in giving a research presentation.
- **Participate** in a short course in research ethics.
- **Receive** a $5000 stipend, free housing on campus, travel support to/from TCU, field trips, access to library and recreation facilities, and paid travel expenses to a scientific conference to present your results.

**Research Opportunities**

- Biophysics
- Nano-science
- Observational Astronomy
- Planetary Astronomy
- Theoretical Modeling and Computer Simulation
- Material Science
- Chemical Physics

**Application Deadline**

February 20, 2015 or until all positions are filled.

**Contact Information**

Dr. Peter Frinchaboy  
TCU Department of Physics and Astronomy  
p.frinkchaboy@tcu.edu  
phone: 817-257-5387

**Summer 2015 Program Tentative Dates**

June 1 through July 31, 2015

**FAQs**

- How hard is it to get in the program?
  The number of well-qualified applicants is about 15 times the number that can be accepted, so it is very competitive. It is wise to apply to a number of REU programs and hope to get accepted into one. Check out the NSF web site for information on all the REU programs: [http://www.nsf.gov/crsspgram/reu/](http://www.nsf.gov/crsspgram/reu/)

- What kind of preparation do I need to be competitive?
  For the TCU REU, you should have Modern Physics or Physics 3, but the preparation you need depends on the research area you want to work in. For example, C++ programming experience is...
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/.

Jorge A. López
Schumaker Professor, Physics Dept., UTEP, 915-747-7528

What have I been doing?