

# The Hispanic Physicist

The Newsletter of the National Society of Hispanic Physicists

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## 7<sup>th</sup> NSHP Annual Meeting to take place with SACNAS in Albuquerque on Oct. 2-5

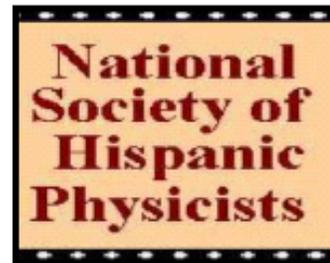
The 2003 annual NSHP meeting will take place in conjunction with the meeting of the Society for the Advancement of Chicanos and Native Americans in Albuquerque, New Mexico this coming October 2-5.

NSHP will sponsor two scientific symposia on Friday, October the 3rd, both from 9:45 AM to 11:45 AM. One of the symposia, organized by NSHP president Dr. Luz Martínez Miranda, will be on Materials Engineering: How is it useful for all engineering?, and the second one, organized by NSHP's Keivan Guadalupe Stassun, will be on New Frontiers in Astronomy and Space Science: Advancing Discovery, Serving our Communities.

Also planned is a meeting of the NSHP Executive Board on Friday the 3rd from 1:30 to 3:00 PM. Everybody is welcome.

NSHPers will also participate in the judging of posters as well as in the mentoring of students and conversations with scientists. NSHP members need to register online with SACNAS at <http://www.sacnas.org/>.

**See you there!**



## Martin Michael Nieto named LANL Fellow

Martin Michael Nieto has been named a Fellow by the Los Alamos National Laboratory; this is the Laboratory's highest scientific honor. During his 31-year career at Los Alamos, Nieto has made significant contributions to several areas of physics including particle physics, quantum mechanics and astrophysics. Nieto, among other things, has explored the chances that there may be more than one way to beat gravity. Nieto wonders whether antimatter, which has the opposite properties of ordinary matter, might not fall down when dropped. Antimatter and matter destroy each other when they meet, so nobody would want to drive an antimatter car.

His work has influenced both theoreticians and experimentalists and is nationally and internationally recognized. In addition to his personal scientific contributions, Nieto has also contributed to the Laboratory by encouraging numerous collaborations and inspiring a league of young scientists.

**¡Felicitaciones Miguel!**



## Research Profile: Laura A. Lopez

Originally from Barrington, Illinois, Laura Lopez is entering her fourth year as an undergraduate at MIT majoring in physics with minors in astronomy and political science. She is a two-time recipient of the American Physical Society Corporate Minority scholarship, and she recently presented posters at the 202nd American Astronomical Society meeting in Nashville and the Women in Astronomy II meeting at Caltech.

Presently, Laura is working with Dr. Herman Marshall of the MIT Center for Space Research on analysis of the X-ray spectrum of SS 433 taken from the High-Energy Transmission Grating of the Chandra X-ray Observatory. SS 433 is thought to be a binary consisting of a large blue normal star supplying gas to a massive black hole which then ejects a small portion of the accreted material in twin, oppositely directed jets at 26% of the speed of light.

Observed while the companion eclipsed the jets, she is elucidating the geometry of the system based on the X-ray spectrum of the visible part of the eclipsed jet. Laura is currently writing the paper with her results to be submitted by the end of the summer. She expects to write her undergraduate thesis on similar work. Laura plans on pursuing a PhD in observational and theoretical astrophysics.



### News you can use

#### Study Sites for Introductory Physics

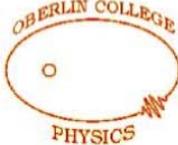
The Web has many sites devoted to helping students study physics. But rather than helping students with tutorials on specific topics or guiding students through sample problems the 4 sites I review focus on study habits and procedures which help students better learn physics.

Daniel Styer of Oberlin College maintains **Study Tips for Introductory Physics** at <http://www.oberlin.edu/physics/dstyer/StudyTips.html> and a related site **Solving Problems in Physics** at <http://www.oberlin.edu/physics/dstyer/SolvingProblems.html>. Direct and to the point this is the advice any of us might give to our students.

Lawrence Shepley at the University of Texas at Austin maintains **How to Study Physics** (<http://www.rel.ph.utexas.edu/~larry/how/how.html>) an update and reprint of a 1977 pamphlet written for the Learning Skills Center at UT Austin by David Hubin and Charles Riddel. Longer than the first site it is also more comprehensive.

The site Donald Simanek of Loch Haven University is also named **How to Study Physics** at <http://www.lhup.edu/~dsimanek/chapman.htm> and it is a reprint of a 1955 pamphlet by Seville Chapman. The site I maintain is a little different. **Introductory Physics: A Learner's Guide** at [www.brynmawr.edu/Acads/Physics/study/index.html](http://www.brynmawr.edu/Acads/Physics/study/index.html) is a collection of essays which try to explore why studying physics is difficult for many students.

For more information contact: Juan Burciaga, Department of Physics, Bryn Mawr College



#### Assistant/Associate/Full Professor Position Experimental High Energy Physics University at Buffalo, SUNY

The Department of Physics anticipates a faculty opening in experimental high energy physics starting in September 2004. We seek applicants with an outstanding record of research and leadership in any area of experimental high energy physics or astro-particle physics, who are also committed to excellence in teaching. The successful candidate will be expected to start a federally funded experimental group in the Department and play a lead role in one or two additional faculty hires anticipated in the near future. Salary will be negotiable and commensurate with rank and experience, and attractive start up funding will be available. The Department has strong research programs in high energy theory, condensed matter/materials physics, and applied physics, and a new program in cosmology/astro-particle theory. Prospective applicants should submit a full resume, which includes a list of publications, a detailed research plan, a statement of teaching philosophy, and a list of at least three persons who may be asked to write letters of recommendation, to Chair, High Energy Search Committee, Department of Physics, University at Buffalo, The State University of New York, Buffalo, NY 14260-1500 by the initial deadline of November 15, 2003. Applications received by the initial deadline date will receive full consideration, and applications will continue to be reviewed until the position is filled. Candidates are encouraged to submit applications electronically by e-mail to [high-energy-search@physics.buffalo.edu](mailto:high-energy-search@physics.buffalo.edu) (pdf format preferred). We especially welcome applications from qualified members of protected groups. The University at Buffalo is an Equal Opportunity Employer/Recruiter.

**The Hispanic Physicist.** Published whenever there is news and the editor has enough time. Send news, letters, congratulations, etc. to Jorge A. López, Physics Department, Univ. Texas at El Paso, 500 W. University Ave., El Paso, TX 79968, (915) 747-7538, [jorgelopez@utep.edu](mailto:jorgelopez@utep.edu), <http://physics.utep.edu/nsnp/nsnp.html>.