ASU Physics welcomes the 2011-2012 Academic Year!

ASU Physics welcomes over 80 incoming physics majors, 23 new PhD students, and 8 new PSM-Nanoscience students in Fall 2011. Fall Welcome is a time for new undergraduates to get acquainted with people, organizations, and resources at ASU that will add to their ability to be successful. About 30 new physics majors attended the ASU Physics Welcome, where they met peers, faculty, learned about the Society of Physics Students (SPS), toured facilities, and participated in demonstrations. Thank you Lisa DePaoli for organizing a successful Department Welcome.

Graduate Orientation welcomed the department’s new PhD students and included training, workshops, group discussions, and a welcome reception. PhD students became familiar with their peers, faculty, and opportunities with ASU Physics that will be fundamental to their ability to achieve their goals. Thank you Araceli Vizcarra for organizing a memorable Graduate Orientation.

In the news...

Regents’ Professor Stuart Lindsay was recently featured in ASU News as being one researcher among two ASU Biodesign Institute researchers awarded more than $5 million in funding from the NIH to pursue DNA sequencing technologies.

ASU Physics welcomes new staff members Lisa DePaoli and Natalie Rand. As Undergraduate Program Coordinator, DePaoli is responsible for undergraduate advising services for the department and coordinating the development of over 260 undergraduate physics majors. DePaoli brings previous advising experience from San Diego State University, University of California-Davis, and University of Nevada.

Rand will serve approximately 4500 non-physics major students every semester as General Studies Program Coordinator, Master of Natural Science Program Coordinator, and front office manager. Rand joins ASU Physics from the University of Missouri-Kansas City with a background in academic development, peer mentoring, and student activities.
Welcome to Students of Physics

It has been a pleasure to welcome our incoming students to ASU Physics, one of the largest and most vibrant programs in the US. Physics is the study of all natural and directed phenomena—it describes the dynamics of the universe from the very small to the very large. The concepts of physics begin with the relationships of mass and energy and space and time. It is an elegant field where all observations are described with four fundamental forces which become two in some limits.

The application of physics requires precise measurements which provide the bases for developing mathematical models that describe a phenomenon. But the true value of physics is that these same models are predictive to new phenomenon and they can be applied to solve new problems. Indeed, many of our students find careers solving the most challenging problems that will advance our society in many ways.

ASU Physics embraces a highly interdisciplinary approach to research and the development of knowledge. This approach brings together our students and internationally recognized faculty as they work together in three areas: Biological Physics, Cosmology-Particle-Astrophysics, and Nanoscience-Materials Physics.

Across the country there has been a resurgence in interest of physics and other areas of science. While there may be many reasons for this, my perspective is that our students recognize that knowledge of physics can form the foundation of an exciting career that will be valuable for years to come. Moreover, it will form a basis for continued learning – and what could be better than keeping abreast of the discoveries that will shape our future.

Sincerely,
Bob

Undergraduate Problem of the Month

Something common to many physics textbooks and introductory physics courses is the result that the range of a projectile can be maximized if it is launched at an angle of 45° above the ground. This result assumes that the object is launched and lands at the same level. However in many sports, such as baseball or football, the ball is thrown from a different height than where it is caught or lands. Imagine you are throwing a baseball from a height $h$ above the ground with some initial speed $v_0$, with what angle should the ball be launched relative to the horizontal so that the distance traveled by the ball is maximized? Ignore air resistance and the spin of the baseball.

Participant Eligibility Rules & Processes:
- Any ASU undergraduate student may participate.
- Submissions are due the end of the month (Sept 30) to the Physics Main Office (PSF 470) by 5pm and must include your name and ASU ID number.
- The solution will be posted in the Physics Main Office (PSF 470) until 5pm on Oct 7.
- For every correct solution turned in, the ASU undergraduate student will earn a special treat. The ASU undergraduate student who turns in the most correct solutions at the end of the academic year will be recognized at the Physics Annual Awards Ceremony.

The Department of Physics is not responsible for lost or incomplete entries.

Special thanks to Dr. Covatto for contributing September’s Undergraduate Problem of the Month.

Chair’sNote

- Oct 3: Fall 2011 Graduation Filing Deadline
- Department of Physics Events
- College of Liberal Arts and Sciences Events
- ASU Events

Faculty Trivia

How well do you know your physics faculty? Try your hand at the trivia question below:

This professor is fluent in 4 different languages...

Click here to submit your guess and discover the answer.