ARIZONA STATE UNIVERSITY

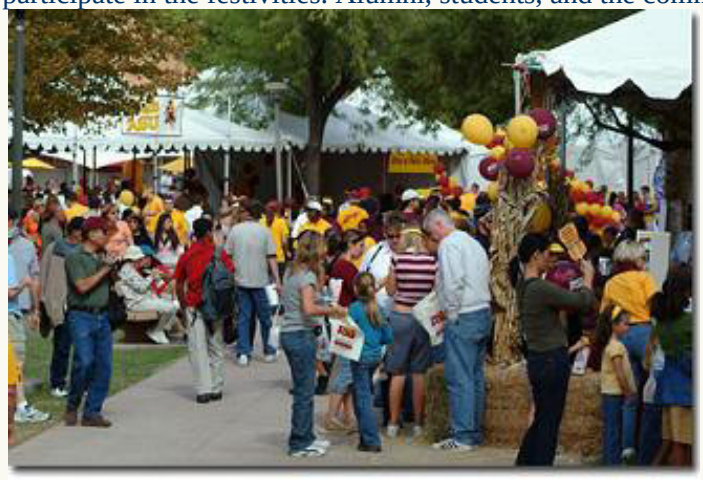
PHYSICS FLASH

News from the Department of Physics ~ September 2007

FALL FUSION

ASU Physics blends past, present, and future during *HOMECOMING* weekend preparation and activities

In October, ASU will welcome back alumni for Homecoming 2007. ASU Physics is gearing up to participate in the annual ASU Block Party - one of the biggest events of Homecoming Week. In addition to food and music, the Block Party will feature tents housing dozens of ASU departments, each on hand to participate in the festivities. Alumni, students, and the community will be invited to visit the tents to learn more about what is happening in ASU departments.



With the spirit of homecoming in mind, ASU staff members Tim Cook, Sabrina Mathues, and Peg Stuart along with the ASU Chapter of the Society of Physics Students have developed a physics Block Party exhibit that brings past, present, and future ASU students together to celebrate physics education and research.

This year, ASU Physics has chosen the theme ***Physics: Get Into The Game!*** for our tent display. This exciting, interactive display will invite visitors to participate in various sports including football, golf, baseball, and - believe it or not - ice skating! As the visitor participates, Society of Physics Students (SPS) will be on hand to talk about different principles of physics that are occurring at that moment. Large, colorful posters created by SPS students will explain the physics principles as well. The interactive displays will be accessible to adults as well as children, adding to the family atmosphere of the Block Party.

"It has been a lot of fun to plan and develop this event" says Peg Stuart, Physics Department Manager and ASU alumna. "As an ASU graduate, the idea of working with current ASU students to hopefully pique an interest in physics for a child attending the Block Party really makes the event worthwhile for me."

Tim Cook of the ASU Physics Instructional Support Team has contributed his knowledge and expertise in organizing the displays themselves. Tim oversees demonstrations for all the Physics lab classes throughout the year and is building demonstrations specifically for this year's event. Sabrina Mathues, Physics Undergraduate Coordinator, has worked with SPS to get students involved in the planning of the event. "By collaborating with our undergraduate students, we're not only utilizing one of our best resources for physics and sports knowledge, but we are also creating a venue to showcase their academic

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IN THE NEWS...

ASU Physics welcomes Professor Robert Ros. Dr. Ros will join the faculty next semester as Associate Professor of Physics. He comes to ASU via University of Bielefeld (Germany) where he was part of the physics faculty. His research focuses on experimental nanoscale biophysics.

Congratulations to ASU Professor Timothy Newman who was recently promoted from Associate Professor to Full Professor. Dr. Newman joined the department in 2002. His research has focused on fluctuations in biological systems.

ASU Professor Peter Bennett highlights his research in a recent issue of CFN News - a web-based newsletter for the Center for Functional Nanomaterials at Brookhaven National Laboratory. Professor Bennett is participating in collaborative research using a low-energy electron microscope or LEEM to develop functional nanoscale objects. To read Dr. Bennett's article **CLICK HERE**.

ASU Professor Stuart Lindsay was one of eight researchers in the country to receive

efforts to the public."

The Block Party will take place on **October 27th starting at 4:00pm** with the ASU Physics tent located on the lawn behind the University Club and adjacent to Old Main. The event is open to the public. Everyone is encouraged to come out and show your support for ASU Physics and its wonderful students!

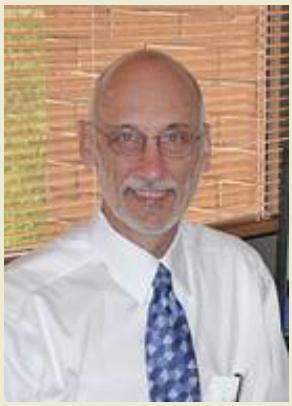
For more information about the ASU Homecoming, please visit http://www.asu.edu/studentaffairs/ASASU/homecoming/.

For information about the ASU Chapter of the Society of Physics Students, please email asuspsoff@googlegroups.com

funding from the National Institutes of Health to develop revolutionary technologies that would make it possible to sequence a genome for $1,000. His research was featured in a recent *ASU Insight* article. To read the complete article, **CLICK HERE**.

Comments, questions, and newsletter contributions can be directed to Peg Stuart at **margaret.stuart@asu.edu**.

FROM THE CHAIR



Football, Physics, Homecoming, and Friends... The terrific pageantry of college football, the physics of dynamical systems, homecoming - a time to meet friends and renew acquaintances are all important aspects of the upcoming October 27th weekend. In our classes at ASU this Fall, a record number of physics students are being challenged to solve complex problems and to discover new ways to analyze complex phenomena. But during homecoming, we can all take a short break to appreciate the pleasant weather, gatherings at the Block Party, and of course the football.

If there is any science that is discussed inside Sun Devil Stadium on Saturdays, it is *physics*. All around us, we hear discussions of momentum, energy, collisions and trajectories. We might even hear more modern physics terms such as non-linear, chaotic, and black hole.

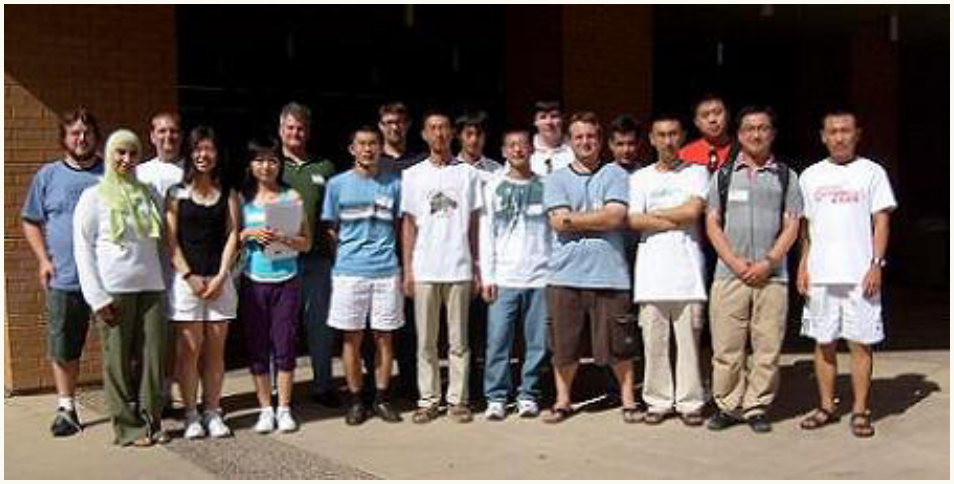
Last month, I mentioned the tremendous growth in the number of students taking foundation courses in physics as part of their general studies program, and this month I am pleased to report that our Physics Majors and Graduate programs are both operating at nearly maximum levels. Physics is at the core of so

ATTENTION ALUMNI AND FRIENDS!

Please visit our new ***ALUMNI & FRIENDS*** page on the web. It contains information on how you can stay in touch and ***show your support for ASU Physics***. We would love to hear from you. Just go to **http://physics.asu.edu/alumni/welcome.php**.

A GRADUATE *CLASS* ACT

With two months under their belts, ***ASU Physics' new graduate class*** is finding their way through ***tough*** courses, ***interesting*** research, and an occasional foray into inventing a new American slang. This past August, ASU Physics welcomed its new class of graduate students. Consistent with the high standards of the recruitment process, this year's graduate class is among the brightest, highest-achieving group the department has ever recruited. They are a diverse group of men and women from across the



The 2007 ASU Department of Physics new graduate class

many fields and our forward-looking and interdisciplinary approach at ASU seems to be inspiring to our students.

The opportunities for our students begin with innovative classes and laboratories and build to research opportunities where students work closely with our distinguished faculty. The all important social and professional opportunities are availed through our very active student organization - the Society for Physics Students (SPS).

I hope you will visit our website to join our email list and learn about opportunities for supporting ASU Physics. Please come by our table at the Block Party to share your perspectives on Football, Physics, Homecoming and Friends.

- Robert J. Nemanich
Professor and Chair

HAPPY BIRTHDAY!

Sharon Puzio is one of the outstanding student workers we have covering the desk in the main office. As Sharon puts it, she "FINALLY" turned 18 on September 23rd!

United States and the world. For many of them, the last couple of months have been challenging considering the transition to a new school has been accompanied by a transition to a new country and, for many, and unfamiliar language. A challenge they all share - regardless of where they came from - is the depth and breadth of coursework and research in which they are now fully immersed.

Choosing Arizona State University was easy for **ASU Physics new graduate student, Raiya Ebini**. Raiya was so determined to attend ASU, she didn't apply to any other college. She knew she wanted to be a Sun Devil.

Originally from Jordan, Raiya arrived to the United States three years ago and has now started work towards her PhD in Physics. Raiya is particularly interested in the research currently underway in Professor Stuart Lindsay's lab.

It is that research that drew her to ASU and she hopes to become involved in similar research during her career here. Her life's aspiration would be to use the knowledge and experience she gains at ASU to help create a research institute in her home country for future generations.

Although she misses her friends and family in Jordan and their community activities, she is adjusting well to the warm weather, the new environment, and the challenges that come with starting a new program. When Raiya arrived in Arizona, she says she was immediately drawn Arizona's beautiful sky, particularly the sunset. She has also done her best to make the English language her own and in a way that brings smiles to her friends and fellow students. For example, if you run into Raiya in a hallway and say "hello", don't be surprised if she responds with "Hey, what's tickling?"

ASU Physics is proud to have Raiya Ebini as part of our new graduate class. Her warm enthusiasm and dedication to the program are just another example of the high caliber students ASU Physics is privileged to have in the department.

For more information about the ASU Department of Physics' graduate program, please visit http://physics.asu.edu/graduate/welcome.php.