Fall 2013 Graduation

Despite several inches of snow, graduation was a joyous event on December 14, 2013. Two undergraduate students and four graduate students received their degrees amid friends and family.

Alex Blanton and Andrew Hartweg both earned a BS degree in Physics and will be continuing in our MS program this January. We are happy to have two of our own fine students continue their study with the department.

Andrew Onaghise, Oluwatobi Olorunsola, Yogeshbhai Patel, and Adetola Quadri received the MS degree in Physics. Adetola and Oluwatobi both successfully completed the thesis option this past semester and copies of their theses are available for review in the Physical Sciences Library at WIU. Oluwatobi will begin pursuing a doctoral degree at Oklahoma State University in January and we wish him well.

Congratulations to all of our graduates and good luck in your future endeavors.
From the Desk of Dr. Mark S. Boley

We are happy to welcome new and returning students, as well as our hard-working faculty, for the spring 2014 semester. It may be quite cold outside right now, but things are heating up for a great new semester inside the Physics building at WIU! We are especially happy that due to a generous donation this past summer from one of our special alumni (Frank Rodeffer), our upper-level undergraduate majors and graduate students will be using some wonderful new equipment in our computational physics course (PHYS 410). And we have been able to stretch our regular physics budget to provide several new equipment items that will be used in our graduate experimental physics course (PHYS 570). We were also able to update several equipment items used in our undergraduate experimental physics course (PHYS 470) this past fall 2013 semester, which saw a record enrollment of 31 students. With the continued contributions of our alumni and support from our university administration, we hope to be able to continue to update our equipment and laboratories for our upper-level undergraduate and our graduate students in the Physics Department, as both populations have continued to see significant increases.

A number of our students, thanks to the generosity of our alumni, will also see their physics scholarships continue in the spring semester, as their fall semester performance warranted the continuation of these scholarships for an additional semester; so we congratulate our scholarship awardees once again! And we are happy to welcome Andrew Hartweg as a new teaching support assistant for this spring semester, as he completed his B.S. degree in December 2013, along with Alex Blanton, whom we also congratulate on the completion of his B.S. degree, as we welcome both of them into our Physics graduate program to pursue their M.S. degrees. We also congratulate four recipients of the M.S. degree in Physics in December 2013, Andrew, Tobi, Tola, and Yogesh, and wish them the best as they pursue further graduate work or employment.

We are excited to see significant growth in two of our courses for spring 2014 semester (as compared to last spring), namely, our Quad Cities University Physics III (PHYS 213) and our Energy and the Environment (PHYS 150) courses. And we are happy to be able to offer two new specialized courses (at least, they have not been offered for the past 5 years) for our graduate students this spring 2014 semester, Quantum Mechanics II and Superconductivity & Magnetism. These courses have been requested by some of our graduate students for several years, and we are thankful for the faculty willing to teach them this semester.

Finally, we invite you to stop by the main Physics Office, Currens Hall 212, if you are in the area or in the building, and just say "hello"! We enjoy meeting all of our students individually, getting to know them and their interests, and doing our best to personalize their experience in physics and make it worthwhile and enjoyable to them. And we always enjoy chatting with any of our alumni and finding out what is going on currently in their lives. Happy New Year!!  MARK
Scholarship Recipients for Fall 2013

Thanks to our generous alumni and friends, the Physics Department was able to provide over $7500 in scholarship awards this fall. Our scholarship recipients covered the entire spectrum of the department, from freshmen to graduate students, majors in all Physics options, and men and women alike.

In addition to our traditional scholarships, the Physics faculty earned an additional $500 in textbook scholarships from the University Bookstore, just for submitting their Spring 2014 textbook adoptions in a timely manner.

Any donation to the Physics Scholarship Fund goes directly to assisting our students with their university bill and other financial needs. It is disappointing when a talented student leaves school because of financial difficulty and as a department, we are committed to keeping students enrolled despite financial need. For more information on donating to the Physics Scholarship Fund, please go to www.wiu.edu/foundation_and_development

New Course Offerings in Physics

As the job market changes, and the needs of our students change, the Physics Department strives to remain current by offering new courses in Physics.

In Spring 2014, PHYS 576, Superconductivity and Magnetism, will be taught by Dr. Ryan Gordon. This class is already popular with graduate students and will hopefully be successful enough to be offered again in the future.

Dr. Saisudha Mallur will offer PHYS 536, Atomic, Molecular and Optical Physics, for the first time in Fall 2014. AMO Physics is a popular research option within the department and will likely see a high enrollment among our graduate students.

These new courses join the recent addition of PHYS 563, Radio Astronomy, and further diversify the course offerings within the department, leading to a stronger graduate level physics program.
Science: The Final Frontier

On December 3, 2013, Trekkies of all ages converged on Currens Hall for a night of amazing stunts and special effects. The theme of this year’s Physics and Chemistry Demonstration Show was Science: The Final Frontier, exploring the science behind Star Trek.

Eager children and adults watched as experiments were conducted demonstrating astronomy principles, gravity, shocking transformations, vacuum, and the amazing abilities of oxygen and liquid nitrogen. The finale was, as always, an ice cream sundae bar, with a little help from some whipping cream and liquid nitrogen.

The demonstration show continues to be the most popular outreach event hosted by the Physics Department and we hope that some young scientists take a new interest in the world around them because of this event.

High School Visitation Program

Two high schools visited the Physics Department during Fall 2013 to conduct the ever-popular Projectile Motion and Ballistic Pendulum experiments. While here, students also get to use solar telescopes and learn more about careers in physics.

Lewistown High School visited on October 22, bringing a group of fourteen dedicated students. They were the first high school to use our new ballistic pendulums. The Physics Department purchased a full set of pendulums during the summer to improve the student experience in our general education classes, as well as during our high school visits.

Galesburg High School visited on October 25 with forty-seven students and one recent GHS grad, now WIU physics student, Nik Breslin, stopped by to visit and assist with the experiments.

As our high school visitation program continues to thrive, the Physics Department continues to update our equipment and make every effort to give students an enjoyable and educational experience. For more information on visiting the Physics Department, please call the office at 309.298.1596.
**Fall 2013 Alumni Visits**

The Physics Department was happy to welcome two distinguished alumni back to the department this fall, Jon Owens, BS ‘67 and Frank Rodeffer, BS ‘61.

Mr. Owens had not been back to WIU in quite some time, and he was thrilled to see how active our department has become. He was given a tour of several labs and even met a few students. The faculty and students enjoyed hearing about his experience at WIU and how that shaped his career as an engineer for Boeing.

Mr. Rodeffer visited in November for a department tour and to attend the Scholar’s Recognition Banquet, where three of the four students that received the Rodeffer Scholarships were recognized. Mr. Rodeffer’s continued commitment to the Physics Department is greatly appreciated and we look forward to working with him in the future.

Alumni are always welcome in the Physics Department, simply call the office at 309.298.1596 to arrange a visit.

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**30th Anniversary of the Honors College**

On September 23, 2013, the Centennial Honors College celebrated 30 years of supporting exceptional students at Western Illinois University. This celebration included an alumni panel, directors panel, and several social events.

Our very own department chair, Dr. Mark S. Boley, BS ‘87, MS ‘89, participated in the alumni panel, along with Dr. Michael Baxa, BS ‘03. Dr. Baxa now works at Sosnick Lab at the University of Chicago studying protein folding. Dr. Baxa is a frequent visitor to the department and this time we were lucky to see his wife Sybil, also a WIU alumnus, and his two young daughters, Josie and Alexandra.

The Physics Department is proud to support the Honors College and the ten physics students that are currently involved in the honors program. We hope that by participating, the honors students are challenged to become the very best in their field and go on to proudly represent Western Illinois University.
News in Brief

• Congratulations to Physics Office Manager, Tiffany Erickson for receiving the College of Arts and Sciences Civil Servant of the Year Award on December 5, 2013.

• Dr. Paul Canfield of Iowa State University will present the Roger and Jean Morrow Distinguished Lecture on March 31, 2014. The lecture is entitled “Cooking, Fishing, and Jogging through Phase Space: A Practical Guide to Discovering and Understanding New Materials.” For more information, see our website at www.wiu.edu/physics.

• Like us on Facebook! Search WIU Department of Physics.

The Physics Department took the time to have some fun this fall. Above left is a group picture from this year’s fall picnic and above right, Adetola Quadri catches a football at our Family Day tailgate. Below left shows some decorations from Homecoming, and below right shows Stephen Fatokun jumping to pick an Osage orange at the picnic.