

Physics



Old Dominion UNIVERSITY

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Welcome from the Chair



In this issue we report the very sad news that Bob Evans passed away in December. Bob was the instructional support manager and his work over the past five years resulted in a big improvement in the quality of the introductory physics labs. He was always very quick to help any member of the department with any problem. He leaves a big hole in the department and in our hearts.

We also announce the formation of a new research group in accelerator physics, thanks to our partnership with Jefferson Lab. This exciting new initiative will provide more opportunities for graduate students in fundamental and applied physics.

Gail Dodge

Portrait Reception

The November reception to dedicate a portrait of Cliff Adams was a great success! It was wonderful to have members of the Adams' family attend this event along with friends and colleagues. Cliff was instrumental in the early development of the department as well as the Research Foundation and we are grateful to Dr. Pat Clay (photo at right) for donating the funds to enable us to honor him.



About this Newsletter

This newsletter will be published three times per year. Its purpose is to establish and maintain a line of communication with our alumni and friends. Lots of great things are happening in physics at ODU and we want to help make you a part of them. We would also like to hear from you. In each issue we will feature an alumnus and we invite you to submit your name for inclusion.

News/ What's Happening

Agreement with Iraqi University

The president of Salahaddin University in the Kurdish region of Iraq was on the Old Dominion University campus Tuesday, Oct. 10, to sign an International Memorandum of Understanding to allow an exchange of students and faculty between the two institutions.

The exchange is the product of 20 months of work by Moskov Amarian, a nuclear physicist and an Armenian Kurd. It is designed to bolster educational opportunities in a part of Iraq where suppression by Saddam Hussein and the unrest associated with the current war has made it difficult for universities to operate.

The IMOU will allow exchanges involving all academic areas, but Amarian readily admits that his chief goal is to attract physics graduate students from Iraq to study at ODU.

Larry Weinstein Designated University Professor

The title of University Professor was established to recognize outstanding teachers; only tenured faculty are considered for this permanent honor and currently only 32 faculty members at ODU hold the title. This reflects Larry's extraordinary dedication to teaching. Congratulations!



Upcoming Talks and Colloquia

Our colloquium program is off to a great start this semester. We are particularly looking forward to the visit by Marcia Bartusiak, an ODU alumna and award winning science writer, on April 17. She will talk about "Einstein's Unfinished Symphony." Brian Greene, author of the "Elegant Universe: Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory," will be coming to campus as part of the President's Lecture Series on April 12. For more information see: <http://sci.odu.edu/physics/academics/colloquia.shtml>
For more information on Bartusiak or Green see: http://www.marciabartusiak.com/marcia_bartusiak.htm
<http://superstringtheory.com/people/bgreene.html>

Serving in Iraq

Patrick Lahiff, Class of '95



Navy lieutenant (JAGC) Pat Lahiff class of '95, is a great example of what a B.S. in physics can lead to! As an undergraduate, Pat worked in the experimental nuclear physics group building drift chambers for

the CEBAF Large Acceptance Spectrometer at Jefferson Lab. Pat graduated from George Mason Law in 2003 and became a navy lawyer. He was assigned to overseas duty at the Naval Legal Services Office in Yokosuka, Japan about 40 miles from Tokyo. A few months after arriving in Japan he was sent to Baghdad, Iraq for a seven month tour. Lt. Lahiff (shown here sitting in a chair that was a gift to Saddam Hussein from Yasir Arafat) served on General George Casey's staff, the Multi-National Force—Iraq Staff Judge Advocate's Office where he performed various duties, including prison visits. Last we heard, Pat was headed back to Japan in December.

Billy Lactaen, Physics Senior

Billy Lactaen (pictured below far right) is a senior physics major and also a member of the Virginia Air National Guard, 203rd Red Horse Squadron Engineering Shop. Last summer he began working with the experimental nuclear physics group to design a new drift chamber to detect high-energy subatomic particles as part of the proposed \$300 million energy upgrade to Jefferson Lab. As part of his senior thesis research he worked on an autocad design for the new detector and on writing software to read out an existing prototype drift chamber.

Last fall would have been his final semester at ODU but his studies were interrupted when he was deployed to Iraq in November. He is part of the design team for the 557th



Expeditionary Red Horse Squadron tasked to build military facilities and other projects around Iraq. He reports that he is working hard and learning a lot, but looks forward to returning to ODU in May to finish his senior thesis. He has requested reading material related to his research project, so apparently he is making good use of his free time!

Featured Faculty

Accelerator Physics at ODU

Welcome to three new Jefferson Lab Professors!



As of late Fall, there are three new faculty members in the department: Hari Areti (left), Jean Delayen (center right) and Geoff Krafft (below left). All three are from Jefferson Lab's Accelerator Division and together they form the basis of a new Accelerator Group at ODU which opens new and exciting opportunities for our students to study accelerator physics. There are

only a few institutions in the country where study in this field is available. The close proximity of the \$600 million Continuous Electron Beam Accelerator at Jefferson Lab and its proposed \$300 million upgrade is a big advantage to our students.



The new group was made possible by an agreement between Jefferson Lab (via Jefferson Science Associates) and ODU to increase the

number of Jefferson Lab Professorships. These professorships are mutually beneficial in that lab scientists so appointed are afforded faculty privileges at ODU; they can apply for grants and supervise students. In return the university gains time and experience from people doing cutting edge research. Of course the real beneficiaries are the students! It is



anticipated that two new course offerings will be available in the Fall, an undergraduate course in accelerator physics and a graduate course in low temperature physics.

Hari Areti has a doctorate in high energy physics from the University of Ottawa, Geoff Krafft has a doctorate in physics from the University of California, Berkeley, and Jean Delayen has a doctorate in low temperature physics from the California Institute of Technology. Delayen and Krafft are both Fellows of the American Physical Society.

Accelerator physics is only one part of an interdisciplinary field—ultimately we hope to expand this program to include chemistry, math and engineering, forming a center for accelerator sciences.

In Memory Robert E. Evans II



On December 18, 2006 the department lost an invaluable team member and friend. Bob Evans was a dedicated and enormously productive person who had a real passion for knowledge and

helping others to learn. One of his favorite things was working with the Graduate Teaching Assistants in the undergraduate labs and making sure that every experiment worked properly. He spent innumerable hours working on lab manuals to help ensure that procedures were correct and led to data that yielded the expected result. There was a tremendous increase in the quality and professionalism of the physics labs over the five years he was involved with them.

Bob's commitment to others went beyond his work at ODU; he was active with the high school band his wife, Lori, directed and often spent his weekends and vacation time helping the students or chaperoning at band camp and ball games. He was always willing to help others and generous with his time and resources whenever he saw a need.

Before coming to ODU physics, Bob had a distinguished career in the US Navy, serving 27 years. He went from seaman to chief, was commissioned as a warrant officer and then as a limited duty officer, retiring as a lieutenant. Upon retirement he went back to school and graduated from ODU with a degree in Science Education. He was a licensed teacher and taught briefly in North Carolina prior to employment at ODU.

He will be sorely missed by those who knew him; and those who did not will have missed knowing a truly fine individual. The world he touched is richer because of him; poorer because he left so soon.



Virginia Children's Festival

Student News and Activities

SPS Outstanding Chapter

The Old Dominion University chapter of the Society of Physics Students has been selected as an Outstanding SPS Chapter for the 2005-2006 school year. The selection is based on the depth and breadth of SPS activities conducted by the chapter in such areas as physics research, public science outreach, physics tutoring programs, hosting and representation at physics meetings, and providing social interaction for chapter members. Congratulations to all the SPS students for this achievement. Congratulations also to Charles Hyde-Wright and Paul Ulmer who served as the faculty advisors for SPS during that year. For more information about the SPS chapter at ODU visit: <http://sci.odu.edu/physics/opportunities/sps.shtml>



SPS Officers, from left to right, Brian Wieland (Vice President), Peter Bradshaw (President), Jim McGhee (Secretary), Charles Yommer (Treasurer)

Peter Bradshaw has a winning poster

The Tidewater Chapter of Sigma Xi, in co-sponsorship with the Washington, D.C. area chapter of Sigma Xi and the Hampton Roads section of the American Chemical Society held its 8th annual Student Research Poster session. This poster session is the highlight of the fall program of activities. Last fall, students from CNU, ODU, HU, EVMS, UVA and Virginia Tech presented posters on their research across a wide range of disciplines. Peter Bradshaw, an undergraduate student, was mistakenly placed in the graduate student category and won 3rd place for his work on "The Behavior of a Radial Time Projection Chamber." Way to go Peter! (Peter is also president of SPS.)

Fall Cookout

There is always something cooking in physics, and if the weather is bad, the atrium will do (and the seating is not bad, if a bit high). Walt treated us to delicious burgers and hot dogs cooked on his huge home-built grill (made from an oil drum).

