

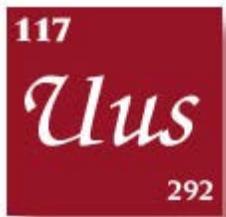


Director's Matters

By H. Frederick Dylla, Executive Director & CEO

Nuclear physics on the world stage

The atomic nucleus was first observed in a laboratory by Nobel Prize-winning physicist Ernest Rutherford in 1911. By mid-century the power and terror of that discovery became known to the entire world when the first atomic bombs were used to bring an end to World War II. Today, nine nations maintain dangerous stockpiles of nuclear weapons. Many useful technologies, however, have resulted from advances in nuclear physics—from power generation to nuclear medicine.



In the last two weeks we have seen major developments in public policy and nuclear physics. On April 9 President Obama and Russian President Medvedev signed a new strategic arms reduction agreement that would decrease the US-Russian nuclear stockpiles by 30%, once their legislatures ratify it. A few days prior, a joint US-Russian team of physicists announced an important discovery in nuclear physics—the appearance of a new, and as yet un-named, element, number 117. The effort to produce and confirm the element's existence involved an extraordinary level of cooperation between Russia's Joint Institute for Nuclear Research and the US's Oak Ridge and Lawrence Livermore national laboratories. Such cooperation would have been impossible during the Cold War. The technical details of the discovery are given by the physicists in a [paper](#) published in the APS journal *Physical Review Letters* and by Sigurd Hofmann from the GSI laboratory in Darmstadt, Germany, in a "Viewpoint" [article](#) published in the new APS online publication *Physics*. The news about element 117 appeared in a [New York Times story](#) on April 6. For a full account of the human drama surrounding the discovery, see the AIP Inside Science New Service article "[An Atom at the End of the Material World](#)," authored by Jason Bardi.

Nuclear physics remained on the world stage throughout last week as dignitaries from 47 nations gathered in Washington, DC, for the [Nuclear Security Summit](#). The objective was to discuss and draft preliminary agreements for adopting tighter controls on the spread of fissionable nuclear materials. The physics community has and will continue to be intimately involved in helping to shape sound public policy on nuclear issues—from enhancing safeguards, to conducting analytical studies, to developing appropriate technology for radiation detection. For example, on the opening morning of the summit, NPR carried an [interview](#) with Francis Slakey, associate director of the APS public affairs office. Slakey voiced his concerns about how new laser technologies for enriching uranium could increase the risks of proliferation of nuclear



material. Such new technologies require new policy decisions.

Next year marks the centenary of Rutherford's discovery of the atomic nucleus—a discovery that has forever transformed and complicated our world.

PUBLISHING MATTERS

Unite for AIP UniPHY

AIP has launched a staff contest to generate ideas for new features and enhancements that might improve UniPHY—a first-of-its-kind social and professional networking platform for physical scientists. Our social networking team launched UniPHY last August, and registered users now exceed 22,000. The team continues to develop the platform's functionality to meet our constituent researchers' needs and preferences, but by tapping the talent and experience of our entire staff, we hope to make this product even better. Gift cards of \$100 will be given for any suggested feature that becomes incorporated into the platform; a \$200 gift card will be awarded for the feature deemed most valuable by the UniPHY team. Email [Chris Iannicello](#) for more details. Suggestions can be made through May 15 by sending Chris an email or by commenting on his [Symmetrix blog post](#).



PRC MATTERS

Reaching out to physics and astronomy department chairs

The Statistical Research Center (SRC) conducts surveys of education and employment in physics and allied fields. The SRC typically contacts physics and astronomy department chairs several times during the year for information essential to many of its studies. The SRC's ability to provide accurate and reliable data depends on their cooperation.

As a byproduct of working so closely with department chairs, the SRC has a contact database that is constantly being updated and may be the most accurate available anywhere. The list of current chairs is available to AIP units and Member Societies, free of charge. If you need to send announcements about meetings, fellowships, or summer programs to the 800 degree-granting physics and astronomy departments, [contact the SRC](#) for assistance. Staff can even customize the list to target a particular subset, such as departments that award astronomy degrees or departments that offer a bachelor's as their highest physics degree.

Online oral histories top 500

Students, researchers, and the public can now read online more than 500 [oral history interviews](#) with leading physicists and astronomers, some of which contain audio clips as well. The Niels Bohr Library and Archives holds an outstanding collection of oral histories, including interviews with such luminaries as Niels Bohr, Werner Heisenberg, Charles Townes, and Hans Bethe. The interviews cover their work and usually include personal reminiscences about their upbringing and personal lives, providing insights that are often available nowhere else. Traditionally one of the library's most popular scholarly resources, the collection has experienced a big jump in use, which coincides with this growing online access.



The library's oral history digitization team (from the left): team leader Julie Gass, Amanda Nelson, Nancy Honeyford, and Barbara Allen.

AIP reached this major milestone with a grant from the National Endowment for the Humanities. The project team (left) worked diligently to contact the interviewees or their heirs for permission, digitize the transcripts, run them through optical character recognition software, correct errors, and

mark them up for the Web. Now that grant-funded work has ended, the team continues to digitize additional oral histories, albeit at a considerably slower pace.

AROUND AIP

Recognizing administrative professionals

This Wednesday, April 21, is Administrative Professionals Day. The administrative professionals at AIP have a good understanding of the institute's inner workings and use that knowledge to help their business units run smoothly. Their organizational and communication skills are vital to AIP's daily operations. Be sure to say "thank you"—often—to the administrative professionals in your area. Visit the International Association of Administrative Professionals website for a [brief history](#) of this event.

GREEN MATTERS

This week is Earth Week

Take some time this week to learn more about important issues facing our planet and about our responsibility to protect it. The [Earth Week website](#) is a good resource. [Wikipedia](#) provides an excellent history of Earth Day and Earth Week.

The ACP Green Committee has organized a brown bag lunch event for Tuesday, April 20, in conference room A from 12:00 – 1:00 pm. Scott Kiser from Waste Management, ACP's recycling company, will discuss single-stream recycling, how it works, and how to maximize its impact.

We invite your feedback to this newsletter via e-mail to aipmatters@aip.org.

For past issues of this newsletter, visit the [AIP Matters archives](#).