AIP|Matters

October 14, 2013

Director's Matters

By H. Frederick Dylla, Executive Director & CEO

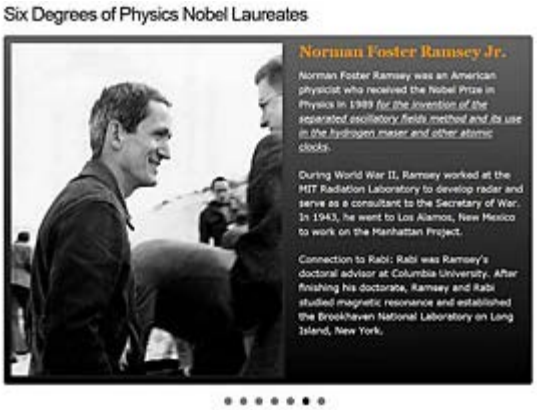
Nobel week 2013

The second week in October always presents an opportunity for getting science in front of the general public with the announcements from Stockholm of the Nobel Prizes in Physiology or Medicine, Physics, and Chemistry. News about advancements in science rarely get much play in any of the media, especially with heady competition from today's news about politics and the economy. The Nobel announcements present to the scientific community an opportunity to promote well-respected scientists and their high-impact science.

My colleagues at AIP, AIP Publishing, and several of our Member Societies spend several weeks preparing for Nobel week. We derive a list of potential winners and attempt to preposition resources, such as archival material or photos that we may have in the Niels Bohr Library and Archives, and key articles published in AIP Publishing journals, Member Society journals, and *Physics Today. Physics Today* sent out Nobel predictions via email on October 4, and nearly 32,000 people opened it.

Leading up to our coverage of the Nobel announcements, NBC News named Inside Science (IS) a go-to place to read quality Nobel announcement coverage. IS produced stories on all three science Nobel Prizes last week.

To educate and generate excitement for the prize announcements, the Inside Science News team, with the help of History Programs' staff, launched an engaging slideshow called "Six Degrees of Nobel Physics Laureates." The slideshow connects the first Nobel laureate in physics, Wilhelm Conrad Röntgen, with the most recent (at the time of its publishing), David Wineland, through other Nobel laureates in physics. The challenge now is to connect the 2013 laureates, Peter Higgs and François Englert, with Wineland. The slideshow was viewed nearly 6,000 times (and counting) in the first six days of its launch.



A crew of AIP and AIP Publishing staff members began at 5:30 am on October 8, announcement day for the Physics Prize, to issue a media advisory and compile a nice compendium of material to support the announcement. The Physics Prize resources

The AIP Media team interviewed APS' Alan Chodos on the 2013 Physics Nobel Prize.

page includes dozens of related journal and *Physics Today* articles, made free access until the end of the year, and a summary of the research, graphics, and other material. APS and AAPT contributed important material to this page, making it a more valuable resource for visitors.

We were very excited about this year's prizes. It was a fairly easy guess that the Physics Prize might recognize the conception of and discovery of the Higgs boson in some way. The prize recognized two of the six theoretical physicists who developed the concept in the mid-1960s and rightly noted the multi-decade effort that led to the successful operation of the Large Hadron Collider and its two large experimental teams that confirmed the particle last summer. The seminal papers were all published in the APS journal *Physical Review Letters.*

François Englert and Peter Higgs meet on July 4, 2012, to hear results from experiments conducted with CERN's Large Hadron Collider that confirmed their theory, postulated 50 years earlier. Image credit and copyright: CERN

For an excellent lay summary of the Physics Prize, see our Inside Science story and Inside Science blog. A popular article on *Physics Today Online* drew more than 30,000 readers in the first two days—that should give you an indication of the draw of the topic and the source alike.

Our expertise is on less firm ground to predict likely winners of the Chemistry Prize. However, we were pleased to hear that Martin Karplus, Michael Levitt, and Arieh Warshel shared the prize for their fundamental work in the modeling and prediction of complex chemical reactions. Their work helps to explain how important behaviors involving electrons at the molecular level contribute to function at the systems level. A good summary of this work can be found at Inside Science, and don't forget to catch the IS blog.

A significant amount of this work was published in AIP Publishing's *Journal of Chemical Physics* (JCP), including the seminal work. Related JCP articles were in the hundreds, and AIP Publishing made more than 70 of the most relevant free access until the end of the year. Access these articles and other materials through the Chemistry Prize resources page.

Join me in thanking the communications crew for their early morning efforts.

The AIP Nobel communications crew. Front row from the left: Jenny Lee, Sarah Suchy, Bert Schwartzchild, Catherine Meyers, Ada Uzoma. Back row, from the left: Liz Dart Caron, Ben Stein, Savannah Gignac, Jason Bardi, and Chris Gorski. Missing are Lalena Lancaster and Charles Day.

AIP Publishing Nobel communications crew, from the left: Jennifer Chiacchiaro, Christine Greeley, Angela Donnelly, Mary Griffin and Melissa Patterson. Missing is Bill Burke.

Physics Resources Matters

PT's Facebook presence reaches milestone and keeps on growing

On Wednesday, October 2, *Physics Today*'s Facebook page acquired its 100,000th fan. And just a week later, it had amassed 15,000 more. PT's October 8 coverage of the Nobel Prize in Physics on Facebook yielded a record single-day increase of its fan base.

At the beginning of the year, the total number of fans was 27,000. Part of the dramatic rise can be attributed to a change that Facebook made in early September to one of its behind-the-scenes algorithms. Now pages like *Physics Today*'s that deliver timely, engaging content are favored even more than they used to be. "To grow on Facebook, you need to post content that your existing fans will want to share with their Facebook friends," explains Charles Day, *Physics Today*'s online editor who runs the magazine's Facebook page. "If your posts aren't interesting, important, or funny, your fans won't like, share, or comment on them. And if that happens, your page will rarely appear in your fans' news feeds." Day posts fresh information daily. Become a fan today.

AIP Development's Nobel Celebration

On the eve of the announcement of the 2013 Nobel Prize in Physics, AIP Development hosted its first Physics Nobel Celebration in Bethesda, Maryland. Friend and donor of the History Programs, Nancy Greenspan, generously offered her lovely home and welcomed friends of AIP's history and education programs in recognition of physics and its remarkable contributions to society. Guests engaged in lively discourse about which field of physics would be singled out in the morning's announcement from Stockholm. The most votes (or guesses) were cast for the Higgs boson theory, and these predictions rang true. Many entered the raffle for the chance to win coveted prizes; as luck would have it, two students from the George Washington University Society of Physics Students (SPS) chapter won a lunch with a laureate—prizes generously donated by laureates Adam Reiss and Bill Phillips. Another guest won lunch with John Mather.

Host Nancy Greenspan (middle) with author and science communicator Curt Suplee (left) and Univ. of Maryland professor Drew Baden.

Washington Post reporter Joel Achenbach, with National Medal of Science winner James Gates (2011).

Nobel laureates John Mather (2006) and Adam Riess (2011).

Veteran Reporter Joel Shurkin with author and science communicator Phil Schewe.

The highlight of the evening was listening to notables in science and science communication recount their experiences about making or reporting on groundbreaking discoveries. It was a wonderful night, and we are already looking forward to next year's event!

SPS students from Howard Univ., the Univ. of Maryland, and George Washington Univ. give science demonstrations and lead hands-on activities so guests can learn a little science between conversations.

Member Society Spotlight

APS helps drive helium bill to success

At a time when Congress is largely gridlocked, APS was one of the leading members of a group of scientific societies, universities, and high-tech companies that successfully got a bill signed into law. The Helium Stewardship Act of 2013 was signed by President Obama on October 2. This law now enables the Federal Helium Reserve—a federal facility that provides approximately 50 percent of the domestic supply of helium—to continue to sell helium to private entities that help drive our economy.

In addition to being used for scientific research at national laboratories, helium is necessary for the fabrication of semiconductors, optical fibers, and in the operation of MRI machines. In an effort that spanned more than a year and included community letters, hearings, meetings with congressional offices, a Department of Interior Inspector General Report, and member alerts, this ad-hoc coalition was able to get a message through to Congress. In anticipation of the President's signature, APS President Michael Turner made this statement, "I am both elated and relieved that Congress has gotten this done. Helium illustrates one of the many connections between research, the economy, and advanced healthcare in this country. I am proud that the APS played a leading role in getting this done and thank our Public Affairs Office and APS members for their tireless efforts." AIP, along with Member Societies AAS, OSA, and AVS, also signed on to a letter of support. Detailed information can be found in FYI #144.

Coming Up

October 13-17

- SOR 85th Annual Meeting (Montréal, Canada)
- October 14: AIP Industrial Outreach event, "Rheology in the Real World," 6-7:30 pm

October 14

- Open enrollment sessions (College Park)

October 16

- Flu shot clinic, 1-4 pm (College Park)
- AIP Publishing quarterly “WOW” ice cream social (Melville)

October 18

- AIP Audit Committee meeting (College Park)

October 21

- AIP Executive Committee meeting (College Park)
- ACP Art Reception, “Intersections: Secrets of the Elements”

October 22

- Brown bag lunch, 12 pm. “Celebrating 20 Years at The American Center for Physics,” given by Bernie Khoury, former executive director of AAPT. (College Park, MD)

October 27-November 1

- AVS International Symposium & Exhibition (Long Beach, CA)
- October 28-29: AIP/AVS Industrial Physics Forum, “Manufacturing Challenges in Emerging Technologies”