



## Director's Matters

*Guest column by James Wonder, Director, Emerging Technology*

### Technology, changing our lives and our business

Practically everything we do today is infused with some form of information technology. Computers are in our pockets with smart phones, our televisions are "internet devices" (not just receivers), our cars are fully computerized, and even our kitchen appliances are starting to become "smart." If I could only drive as smartly.... Last week I got a speeding ticket from a very nice Delaware state trooper. But, thanks to technology, less than 30 minutes after I received the ticket, I paid it online.

Technology has drastically changed the way that companies do business; many large corporations that were slow or reluctant to adapt are no longer in existence. To remain viable, companies need to embrace new technology, use it where and when appropriate, and always look toward what disruptive forces are on the horizon. Take my speeding ticket, for example. Previously, issuing a ticket would spark a huge paper trail, including filing and cashing the check that I sent in. Here, everything was done from the cruiser, and I paid the fine a half hour later. Delaware is embracing new technology in its business model and, I don't hesitate to guess, is more cost effective because of it.

So how are we keeping up with new technology at AIP? Fred Dylla's [column of May 9](#) addressed AIP's mobile initiatives—AIP now offers mobile web views of all of our journals as well as three iPhone/iPad applications for our journals and peer review. We have created an [AIP Labs](#) site to showcase new and exciting technology we are working with. Several staff members tweet on a regular basis and are using Facebook to disseminate information about new and interesting articles, programs, and areas of science. We are also looking forward to integrating into our publishing workflow a new content management vendor that will allow us to more flexibly publish, index, and reuse our content.

These single initiatives are useful. But for AIP to maintain itself at or near the front line as an information provider, we need to keep our eye constantly on the pace and impact of new technologies that can improve the production, dissemination, or appeal of our products and services. We must anticipate potential threats on the horizon and how we might address them. We need to ask ourselves how to best leverage our technology investments for a prosperous future. To ensure our future success, these subjects need to be discussed openly with our colleagues. When thinking of potential solutions I like to think about how I use technology today to enhance my daily activities. How do I use digital media now? How do I use online information sites? What would I like to see? Thinking as a customer allows us to serve our own customers more effectively.

## In new videos, AIP Advances' Executive Editors discuss the journal



There's no doubt that after just five months of publication, AIP's new open access journal [AIP Advances](#) has made the physics community sit up and take notice. Now, close on the heels of June's launch of article-level metrics (a tool that measures abstract views and full-text article downloads), *AIP Advances* will be posting on its homepage a series of video interviews with each of its five Executive Editors.

In the [first video](#), the University of Pennsylvania's A. T. Charlie Johnson discusses *AIP Advances*' open access publishing model, how the Creative Commons license will benefit authors, and the importance of opening up scientific publishing to everyone, especially those in developing countries. Also, Johnson describes how peer review works for the journal and how, after publication, commenting and rating allows articles to rise to prominence on their own merits.

In the next few weeks, two more videos will be posted, in which Executive Editors Vincent H. Crespi and Robert H. Austin discuss their unique take on the journal and their views on open access in general

## PHYSICS RESOURCES CENTER MATTERS

### Eighteen SPS scholars continue tradition of excellence

The Society of Physics Students (SPS) seeks to recognize excellent students and to encourage the study of physics. Through its [scholarship program](#), SPS honors those undergraduates who exhibit exceptional achievement, potential, and leadership.



In 2011, 18 worthy recipients were awarded SPS Leadership Scholarships, including standout Clair Chow, a senior at Idaho State University (ISU) in Pocatello, ID (pictured left). Claire is spending the summer at the University of Illinois at Urbana-Champaign, where she is participating in a Research Experience for Undergraduates (REU) by conducting biophysics research under Professor Taekjip Ha. Upon her return to ISU this fall, she will work in the Chemistry Department dealing with mass spectroscopy and will continue to teach laboratory classes on introductory physics.

Claire has been an officer of the ISU SPS Chapter since the fall of 2008. As president and secretary, she has organized activities such as a Pumpkin Chuck Competition, an Annual Spring Demo Show, Pi Day activities, and more. Bios and photos of all the SPS scholarship recipients can be found on the [SPS website](#).

Intended for physics majors in the latter stages of their undergraduate careers, prizes consist of a top award of \$5,000 and a number of \$2,000 awards. SPS has been honoring its most up-and-coming members with these annual awards since 1985.

### Samuel A. Goudsmit Papers available online

The Niels Bohr Library and Archives is pleased to announce that it has digitized the complete

Samuel A. Goudsmit Papers (1921–1979, 30 linear feet, approximately 67,000 images), and the [collection is now available online](#). The Goudsmit Papers are a major international collection of correspondence, research notebooks, reports, World War II science documents, and other material of Goudsmit, a Dutch physicist who spent most of his career in the US and was involved at the cutting-edge of physics for more than 50 years.



Samuel Goudsmit (left) and Lt. Toepel, Alsos Mission; Stadtilm, Germany; April 16, 1945

Goudsmit, who was scientific head of the Alsos Mission that tracked German efforts to build an atomic bomb during WW II, was a prolific letter writer who saved correspondence and other documents from his student days through the end of his career. Goudsmit was editor of *Physical Review* from 1950 to 1974 and founded *Physical Review Letters* in 1958. He became the first APS Editor-in-Chief in 1966, a position he held until his retirement in 1974.



Captured German document dated September 30, 1943, in Goudsmit's Alsos files

Topics represented in the collection include the development of quantum physics in Europe and its spread to the US, the Nazi atomic weapons program, post-war physics research, and scientific publishing. Because of its breadth and depth, it is the most used collection in AIP's library and archives. (To read more about the life of Samuel Goudsmit and the papers, please visit the [finding aid](#) to the collection.)

Goudsmit's papers and his rich correspondence document the mainstream of physics research from the 1920s through the mid-1970s. The project to digitize the Goudsmit Papers took two years to complete and was partially supported by the US National Historical Publications and Records Commission. For help using the online collection, contact [nbl@aip.org](mailto:nbl@aip.org).

## WHAT'S HAPPENING THIS WEEK

Wednesday, July 27

- Ice cream social, 2 pm (Melville, NY)

Thursday — Sunday, July 28–31

- Center for History of Physics conference, "[Continuity and Discontinuity in the Physical Sciences since the Enlightenment](#)" (College Park, MD)

Friday, July 29

- Reception and public lecture by David DeVorkin, "How the Cold War Changed the Smithsonian's Astrophysical Observatory," 5:30 pm (College Park, MD)

## Member Society Events

July 30 – August 3

- AAPT Summer Meeting (Omaha, NE)

July 31 – August 4

- 2011 Joint AAPM/COMP Meeting (Vancouver, BC, Canada)

We invite your feedback to this newsletter via email to [aipmatters@aip.org](mailto:aipmatters@aip.org).

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