# AIP | Matters

December 9, 2013

# **Director's Matters**

Guest column by Roman Czujko, Director, Statistical Research Center

Sometimes no difference is a good finding

Over the years, many disciplinary societies have raised concerns about the length of time required to earn a PhD in their fields. Is it taking too long? Are we asking students to do too much before allowing them to launch their careers? Does increasing specialization mean that graduate students must spend more time and effort learning about what was done in the past before they can design their own research studies?

These are important questions and there are a number of common trends, most of which effectively add to the time. Foreign citizens spend time waiting for visa approvals before they can come to the United States to begin their graduate studies. Domestic students increasingly take a gap year between completing their bachelor's degrees and starting graduate study. Some students transfer between graduate programs. In many disciplines, support for graduate students is limited and students may need to work off-campus while completing their dissertations on a part-time basis.

There are, of course, many ways to measure time to PhD, and each has both merits and shortcomings. Such measures include: time since beginning graduate school, time since completing a bachelor's degree, and FTE (full-time equivalent) registered time.

Each of these gives us insight into the career pathways in different disciplines. Graduate student support is limited in the humanities, and thus it takes nine or more years (on average) to complete a doctoral degree. Students in education are among the most likely of students in all disciplines to work for several years prior to starting graduate school and, not surprisingly, they earn their PhDs about 14 years after completing their bachelor's degrees.

Median age is my favorite way to measure the time required to earn a PhD. This measure has the advantage of summing up the net effects of many of the kinds of dynamics mentioned earlier. How long does it take a person to earn a PhD in physics or astronomy? What has been the trend in median age for physicists?

Good news: according to data from the NSF, the median age at the time of PhD for physics and astronomy is basically unchanged for the last 15 years and it may, in fact, be somewhat lower than it was five to ten years earlier.

## **Physics Resources Matters**

## Physics Today from the Emilio Segrè Visual Archives

The Emilio Segrè Visual Archives (ESVA), part of AIP's Niels Bohr Library and Archives, is one of the institute's most popular and valued services. For a behind-the-scenes look at ESVA, read the <u>article</u> that photo librarian Savannah Gignac wrote for *Physics Today's* online Points of View department. Here is an excerpt:

But once theories and experimental methods become part of the physics canon, it's easy to ignore or forget who is behind them. How and where did these people develop their careers? Who and what inspired them on their roads to success?... Behind the equations and accolades, it may be difficult to see the human beings who originated those ideas. Photography gives us a rare glimpse into the physicist's life, illuminating his or her path to success.

Read the <u>full article</u> on *Physics Today* online.

SPS fall photo contest: The results are in!

In October 2013 SPS chapters were asked, through social media, to send photos of their fall SPS events for a chance to be featured in *The SPS Observer* magazine and win great physics prizes. More than 120 fantastic and inspiring physics photos were received, far surpassing participation in any previous SPS photo contest. A panel of judges here at the ACP narrowed the entries down to ten, which were put to a public vote on the SPS Facebook page.

The SPS Chapter from Colorado Mesa University took 1st place for "Phone Book Tug-Of-War." Two phone books were interlaced, each page on top of another, creating enough friction between the interlaced pages of the two phone books to withstand the opposing forces applied by the teams of physics and engineering students in a tug-of-war competition. The phone books did not separate, despite the fervent efforts of the two teams of determined students! See the inset for a close-up of the interlaced phone books. View all of the winning photos, along with a sample from each participating chapter, on the SPS website.

### Gemant Award presented to Edwin Krupp

On Friday, November 22, Vice President of Physics Resources Catherine O'Riordan presented the 2013 Andrew Gemant Award to Edwin Krupp, director of Griffith Observatory in Los Angeles in front of the LA City Council. The Gemant Award recognizes significant contributions to the cultural, artistic, or humanistic dimension of physics. Krupp is credited for 40 years of extraordinary public outreach and education through planetarium shows, communication efforts, and research exploring the links between astronomy and ancient culture. Krupp will present his Gemant Lecture, "Star Trek: The Search for the First Alleged Crab Supernova Rock Art" on January 9, 2014 at the AAS 223rd meeting in Washington, DC. See the press release for more details.

## Around AIP

On the December 12th pay stub, eligible employees will see MEMO code "E" with a value (employer and employee share) of employer-sponsored health care coverage; it will also appear in Box 12 code DD of their W-2. This satisfies a new IRS requirement to report the cost of coverage under an employer-sponsored group health plan. Employer-paid health coverage continues to be not taxable. According to the IRS, "This reporting is for informational purposes only and will provide employees useful and comparable consumer information on the cost of their health care coverage."

Employees can access their current and past W-2s online at <a href="www.ipay.adp.com">www.ipay.adp.com</a>.

# Coming Up

#### December 11

- Birthday breakfast (Melville)
- All-hands meeting and milestone presentations (College Park)

#### December 12

- Holiday party for AIP Publishing staff, 1-4 pm at Carlyle on the Green. AIP Publishing will close at 12:30 pm. (Farmingdale, NY)
- Birthday breakfast (College Park)

#### December 18

• Holiday party for AIP staff, 12-4 pm at the UMUC Conference Center (College Park)

#### December 19

• Development Board meeting (College Park)

#### December 24-25

• AIP and AIP Publishing closed for the holidays!

#### December 31

• New Year's Eve - AIP and AIP Publishing close at 3 pm

#### January 1

• New Year's Day - AIP and AIP Publishing closed!