



Director's Matters

Guest column by Gregory Good, Director, Center for History of Physics

Young historians from around the world gather at ACP

For four days in late July, early-career historians of the physical sciences converged on ACP to examine "Continuity and Discontinuity in the Physical Sciences since the Enlightenment," the theme for a special conference sponsored by AIP's Center for History of Physics (CHP). In the 1970s and 1980s, a graduate student conference, the Joint Atlantic Seminar in History of the Physical Sciences (JASHoPS), was held each year and mainly drew its attendees from the eastern US. In comparison, the History Center's recent conference attracted scholars from around the world. Fifty-four participants came from fifteen countries, including China, Japan, Brazil, Mexico, nine European countries, Canada, and the US.

The unique feature of the conference was the way it was organized by early-career historians for themselves and their peers. The organizing committee was chaired by 2010 CHP intern Amy Fisher, who recently defended her dissertation. Committee members included Fábio Freitas (Brazil), Anna Holterhoff and Christian Joas (Germany), Joe Martin and Ann Robinson (US), Pierre Teissier (France), and Xiaodong Yin (China). They wrote the call for papers, selected the papers to be presented, and developed the program. The goal is to reinvigorate the community of historians of physics and to make it broadly international.

Presentations covered a wide range of topics, from physics in Latin America and the development of the Geiger-Müller counter to interactions of the medical and physics communities in the early-20th century over control of x-ray diagnostics and treatments. There was a session on instrumentation, one on Earth and space sciences, and another on theory and experiment. The topic attracting the most attention was the history of quantum mechanics, with papers on Louis de Broglie, quantum optics, quantum measurement in the 1960s, and more.

Conference attendees broke into small groups for tours provided by Niels Bohr Library and Archives Director Joe Anderson and his staff. Although they had heard of NBLA's collections before, many attendees did not realize just how rich they are. Indeed, altogether 23 researchers worked in NBLA immediately before and after the conference. We hope that by introducing young historians to NBLA in person, we will transform them into long-term users and supporters of the library.



Two keynote talks were given. Jaime Navarro (MPI for History of Science,



David DeVorkin speaks with attendees after his public lecture.

Berlin) spoke on transformations in how physics was taught in England in the 19th century. Michel Janssen (University of Minnesota) discussed "arcs and scaffoldings" in the history of relativity and quantum theory. The CHP also sponsored the first in a new series of Science Heritage Public Lectures. David DeVorkin, senior curator of astronomy and space science at the National Air and Space Museum, Smithsonian Institution,

gave a lively talk on how the cold war changed the Smithsonian's Astrophysical Observatory.

Thanks go to long-term supporters of the CHP who accepted invitations to comment on papers presented: Dieter Hoffman, Richard Staley, Alexei Kojevnikov, Michel Janssen, Roger Launius, Christoph Lehner, and Joan Bromberg. Their presence made this an intergenerational conference, too, and afforded some continuity in scholarship.



Early-career science historians from across the globe contributed their expertise to make the conference a learning experience for all.

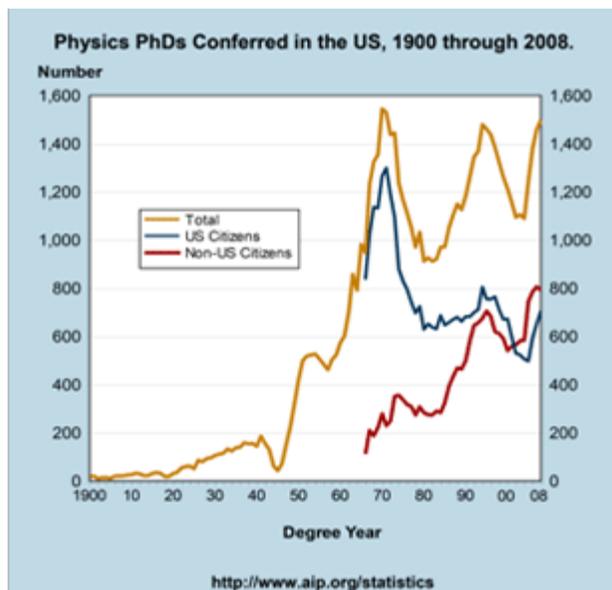
The energy levels of the young historians were wonderful to witness. Discussions were lively and cheerful, both during and outside of sessions. The conference closed with a roundtable discussion of publication of some of the talks and with great hopes for more such meetings in the future.

PHYSICS RESOURCES CENTER MATTERS

Focus on physics graduate degrees

The number of US citizens among physics PhD recipients is on the rise. Although the number of physics PhDs conferred on both US and non-US citizens has been climbing in recent years, the number going to US citizens has been increasing at a greater rate. As a result, US citizens made up 47% of the PhD class of 2007–08,

up from an all-time low of 40% in 2004. Shifts in the citizen makeup of PhD classes are, in part, a result of changes in the composition of incoming physics graduate students five to eight years earlier. Increases in the number of US students receiving undergraduate physics degrees and in the proportion accepted by physics PhD programs affect the number of US citizens earning physics PhDs.



The Statistical Research Center recently published a report by staff members Patrick Mulvey and Starr Nicholson titled "*focus on Physics Graduate Degrees*" that presents findings from the annual Survey of Enrollments and Degrees and the Follow-Up Survey of Recent Degree Recipients. The trend data detailed in this *focus on* include PhDs and master's degrees received by the class of 2008. The publication also examines issues related to gender, citizenship, and race. The *focus on* can be found under the [Graduate Education](#) tab of the center's website and is part of a series that covers astronomy enrollments and degrees, physics enrollments, and physics undergraduate degrees.

MEMBER SOCIETY SPOTLIGHT

AAPT meets in Omaha

Creighton University in Omaha, NE, hosted this year's AAPT Summer Meeting. [Read meeting highlights](#) on the AAPT Website.

Several AIP staff members attended and contributed to the activity. During the opening reception, the Society of Physics Students (SPS) hosted the Undergraduate Student Poster Session, which featured 12 posters, many of which were by students with the recently established Southeast China SPS Chapter. Four students were honored for excellence at the SPS awards reception. The event featured Barbara Jones, a well-known nano-physicist who recounted her career path from student to researcher at IBM. The students then explored celestial orbits by rolling marbles in a potential well formed from a stretched Spandex surface.



Gary White (back center) and Barbara Jones (center with gray jacket) pose with students at the SPS Awards reception.

SPS Director Gary White presided over two sessions, "Research on Learning Assistants and TA's" and "Recruiting Students to High School Physics," and attended the Physics Education Research Conference.

Director of Education Jack Hehn joined a group of interested physics teachers to discuss the National Research Council committee's report entitled [A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas](#). AAPT, APS, and AIP have followed the progress of this issue as it has developed over the last two years. They considered ways in which the physics community can offer their expertise as the new Science Education Standards are written.

Past Physics Resources Center Vice President Jim Stith gave a plenary presentation, "Reaching Out to the Public: A Necessary Dialogue," to a packed auditorium. During the awards session that followed, Bo Hammer, Associate Vice President of Physics Resources, presented the AIP Prize for Children's Science Writing to Gillian Richardson for her outstanding book *Kaboom! Explosions of All Kinds*. Ed Prather, a member of AIP's Committee on Education, received the AAPT David Halliday and Robert Resnick Award for Excellence in Undergraduate Physics Teaching.



Bo Hammer presents the AIP Prize for Children's Science Writing to Gillian Richardson.

Bob Finnegan and Mary Ellen Mormile in the Exhibits Division provided booth space sales and managed the exhibit program. Although space was limited in the exhibit hall, the morning and afternoon program breaks that took place in the exhibit area helped to generate a high level of activity at the booths throughout the meeting.

Congratulations to AAPT for running a successful meeting.

We invite your feedback to this newsletter via email to aimatters@aip.org.

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