

THE DIRECTOR'S CORNER

FROM TRINITY TO "TRACTRICIOUS"

As we gear up for the 2008 Congress at FermiLab (and its eye-catching art such as the piece known as "Tractricious"), you might be wondering what became of the 10



"Tractricious" is made from accelerator beam pipe; Wilson is in the background.

recommendations from the participants in the workshops at the 2004 Congress in Albuquerque, NM (and its historic Trinity site where the first A-bomb was tested). Well, wonder no more! Here is a brief summary of responses to the Ethics Recommendations at the 2004 Congress. We owe a big thank you to the current and past SPS Council Committees on the Ethics Recommendations for keeping us moving on this front, particularly, recurring Chair William DeGraffenreid and recurring member Lee Sawyer, and to Bo Hammer for his excellent moderation of

the workshop discussions. THANKS!—In my view, there is much to be proud of in this list.

I am optimistic that one of the outcomes from the 2008 Congress will be a comparable set of grass-roots recommendations regarding scientific citizenship, a set that will move the society even closer to the ideals it professes. I am looking forward to the discussions at FermiLab, working to improve the physics honor society through the workshops, and I hope that you are making plans to join us, too. In the meantime, take a few minutes to read through this list, pondering the thoughts and processes that brought us to this point—and feel free to let us know how you feel about where we're headed.

— Gary White



Marker sits at Ground Zero at the Trinity Site.

ETHICS RECOMMENDATIONS from 2004 Congress, with the Society's Actions and Responses

— Compiled by William DeGraffenreid and Gary White

1. Sigma Pi Sigma/SPS should issue a resolution stating that ethics education be integrated into the physics program.

Statement on Engaging Students in Issues of Professional Conduct Adopted by the SPS Council on September 29, 2006

The professional behavior of researchers is integral to the success of individual scientific investigation as well as to the ongoing success of science itself. Incidents of dishonest research or authorship practices, while rare, undermine the efforts of those working towards the advancement of science for the benefit of humanity. These dishonest actions, committed in the interest of career advancement, name recognition, financial gain, or simply through ignorance, are deplorable and should be seriously addressed by the physics community.

The Society of Physics Students (SPS) recommends that physics departments include a "professional ethics" education component in their programs at both the undergraduate and graduate levels. This component should focus on promoting honest and professional conduct in students' careers by involving them in discussions of responsible scientific behavior.

A resolution was passed by the 2006 SPS Council:

http://www.sigmapisigma.org/ethics_statement.html

Disseminated to all physics departments and notification to all SPS chapters in 2006-07 academic year.

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AMERICAN INSTITUTE OF PHYSICS

The American Institute of Physics (AIP) is a not-for-profit membership corporation chartered in New York State in 1931 for the purpose of promoting the advancement and diffusion of the knowledge of the science of physics and its applications to human welfare. In order to achieve its purpose, AIP serves physics and related fields of science and technology by serving its Member Societies, individual scientists, educators, students, research and development leaders, and the general public with programs, services, and publications—*Information That Matters*.

The Institute publishes its own scientific journals as well as those of its Member Societies; provides abstracting and indexing services; provides on-line database and e-mail services; disseminates reliable information on physics to the public; collects and analyzes statistics on the profession and on physics education; encourages and assists in the documentation and study of the history and philosophy of physics; cooperates with other organizations on educational projects at all levels; and collects and analyzes information on Federal programs and budgets.

The Institute represents approximately 110,000 scientists through its Member Societies. In addition, approximately 5,000 students in more than 600 colleges and universities are members of the Institute's Society of Physics Students, which includes the honor society Sigma Pi Sigma. Industry is represented through 50 Corporate Associates members.

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American Physical Society
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AVS—The Science & Technology Society
American Geophysical Union

Other Member Organizations

Sigma Pi Sigma, Physics Honor Society
Society of Physics Students
Corporate Associates

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2. Sigma Pi Sigma/SPS should create/disseminate a set of ethics resources including curricula, case studies, speaker lists.

Ethics resources on SPS website at: <http://www.spsnational.org/governance/ethics/>

3. Sigma Pi Sigma/SPS should expand its efforts to involve alumni and industry in its initiatives to promote career diversity.

SPS is an active participant in Industrial Physics Forum and other industry events; see reports at:

<http://www.spsnational.org/meetings/reports/>

SPS has expanded its career website (and it draws more hits than any other part of website):

<http://www.spsnational.org/cup/>

Sigma Pi Sigma events for alumni expanded, including Project Awards (see page 24):

http://www.sigmapisigma.org/awards/2008/cp_recipients.html

http://www.sigmapisigma.org/awards/2007/cp_recipients.htm

Sigma Pi Sigma Hidden Physicists receive more visibility:

<http://www.sigmapisigma.org/cup/profiles/hidden.html>

4. Sigma Pi Sigma/SPS should assign a committee to investigate existing professional society and publisher statements and guidelines regarding ethics, with an eye to endorsing these or modifying them for our use.

2006 SPS Council endorsed the APS "Guidelines for Professional Conduct" (see http://www.aps.org/policy/statements/02_2.cfm).

5. Sigma Pi Sigma/SPS publications should have ethics-based guidelines, including those that recognize students' roles in publications.

2007 SPS Council endorsed the AIP "Statement of Ethics and Responsibilities of Authors Submitting to AIP Journals" (see <http://www.aip.org/pubservs/ethics.html>).

6. As an honor society, Sigma Pi Sigma/SPS should have a disciplinary procedure for those who violate the standards of the society.

Discussions at SPS Council, but no action taken.

7. Sigma Pi Sigma/SPS should issue a statement on the importance of achieving diversity in physics.

Many discussions at SPS Council meetings, but no official statement to date. Related actions include demographic data on membership forms in 2007, and Future Faces of Physics adopted by SPS Council as theme in 2007-08; see

http://www.spsnational.org/news/2007/future_faces.htm

8. Sigma Pi Sigma/SPS should expand its general portfolio of programs and resources to include those targeted at groups under-represented in physics.

Partnerships with MentorNet (electronic mentoring especially designed for individuals from under-represented groups in science <http://www.spsnational.org/partnerships/mentornet.htm>), National Society of Hispanic Physics (concurrent membership agreement and meeting presence), NASA-MUSPIN (intern and chapter funding opportunities), and National Society of Black Physicists (meeting support and presence), initiated and active.

2007 SPS Council adopted Future Faces of Physics as its theme in 2007-08 and promoted it with the Physics Jeopardy game; see

http://www.spsnational.org/news/2007/future_faces.htm

9. Sigma Pi Sigma/SPS should issue a statement recommending that the tenure and post-tenure review process consider more strongly the tenure candidate's impact on student development.

Discussions at SPS Council, but no actions taken.

10. Sigma Pi Sigma/SPS should issue a request to chapters that chapters educate and inform students about the tenure process that physics faculty undergo.

Diandra Leslie-Pelecky's case-study regarding the tenure issue is featured on the website; promoted to SPS membership through email.



Portia Wolfe (left) and Nicole Duncan (right), SPS members from the University of Colorado-Boulder; with Larry Schwartz (center), Director of University Relations, Schlumberger/Doll Research at the APS/AIP Academic Industrial Mixer in 2007.



Physics Jeopardy, designed by SPS Program Coordinator Kendra Rand, is a hit at the joint NSBP/NSHP meeting in 2008.

