# AIP|Matters

Monday, November 12, 2007

## Director's Matters

Mildred S. Dresselhaus, AIP Governing Board Chair

On the first day of November, AIP's Executive Committee and Governing Board gathered in College Park for the fall meetings of these two important groups. As I mentioned in last week's *AIP Matters*, the fall meeting focuses on the coming year's budget. The Fiscal Year 2008 Budget allows modest growth in services to our Member Societies, the launching of a major upgrade to our on-line publishing platform, *Scitation*, and a $1.0M contribution to our new reserve fund established last year to build an endowment for the Physics Resources Center's programs.

Most of the Governing Board is composed of Member Society representatives, proportionate to each society's membership. The Board's 41 members bring a rich diversity of opinion and experience to AIP governance, yet they cede more detailed interactions to the 13-member Executive Committee. The service of Board members is voluntary, and we are fortunate to receive such valuable advice, especially since most Board members are also full-time professionals. As a small token of our gratitude for their recent service, AIP hosted a dinner and tour the evening before the Board meeting at the Riversdale Mansion. This colonial-era mansion is located just over a mile south of the ACP building. It is the ancestral home of the Calvert family, the founders of the University of Maryland, and site of the first test of the original telegraph line built by Samuel Morse.

Riversdale Mansion, College Park, MD

At the fall Board meeting, we also elect new members of the Executive Committee and a Member-at-Large of the Governing Board. Anthony Atchley (ASA), Bruce Curran (AAPM), Tim Cohn (AGU), and Rudy Ludeke (AVS) will begin new terms on the Executive Committee in January, and Jim Hollenhorst from Agilent Technologies will join the Governing Board in March as the new Member-at-Large.

Sincerely yours,

Fred

## Publishing Matters

STIX Fonts

**A crowning achievement**

Crowning a 12-year development effort in collaboration with six large STM publishers, AIP announced last week the release of the full complement of the *STIX Fonts* in a beta test version. The *Scientific and Technical Information eXchange (STIX) Fonts* are designed to simplify online display of math symbols by providing a free, comprehensive set of fonts for print or web display of every character/glyph required for scientific publishing in any discipline. There are more than 5,000 characters with a total glyph count of more than 8,000. (A *glyph* is a particular representation of a character. The character "Capital A" can have, for example, regular, bold, italic, and bold italic glyphs.)

*STIX Fonts* are Unicode-based, making them very important for the future of XML-based scientific publishing. (Unicode is the *lingua franca* of XML.) Word of this highly anticipated release spread across the web, aided by postings on key news services and blogs like Nascent. Within the first five days, the beta test fonts had been downloaded more than 9,000 times, and the *STIX Fonts* Technical Working Group had received more than 20 pages of feedback.

*STIX Fonts* is a project of six large STM publishers, including AIP. The other publishers are the

American Chemical Society, American Mathematical Society, American Physical Society, Elsevier, and IEEE. Tim Ingoldsby of AIP has served as project manager for this effort. The final, production version of the *STIX Fonts* should be released by the end of 2007.

## Physics Resource Center Matters

**Who will teach high school physics?**

There has been a growing concern about the long-standing shortage of qualified physics teachers. The Physics Teacher Education Coalition (PhysTEC) is a project funded by the National Science Foundation and is designed to help put more qualified physics teachers in high school classrooms. The Coalition includes APS, AAPT and AIP. APS is the lead organization in the project, and it has contracted with the AIP Statistical Research Center (SRC) to study why some physics bachelors go into high school teaching while others choose not to.

SRC added a set of questions to one of its core surveys to develop data on the factors that might influence physics graduates in the direction of or away from a high school teaching career. Findings from the first round of data collection were reported last week to Ted Hodapp of APS and the PhysTEC project team. The data lend very strong support to the fundamental importance of role models in graduates' decision-making process. Generally, people who are giving serious thought to becoming tomorrow's high school physics teachers took high school physics from well prepared, engaging and dynamic teachers.

## Around AIP

**Testing ... 1 ... 2 ... 3**

Technology staff from Publishing Technology and Business Systems and Operations traveled to the IBM facility in Sterling Forest, NY to prepare one of AIP's three annual Disaster Recovery tests. This test focused on the Production, Finance and Accounts Receivable divisions. Data restoration and systems preparation took place October 25 - 26, and staff from the two Melville divisions performed a functional test of the recovered environment the following day. College Park staff tested via remote access. We are always improving the recovery process; each testing exercise reveals new challenges and new elements to integrate into our recovery program. In this case, the recovery was successful and the environments were restored in record time. Many thanks to all the participants for their hard work in preparing and executing these tests.

## Around ACP

***Interstices* — new art exhibition opens at ACP**

Since its inception, the American Center for Physics (ACP) has been home to semiannual art exhibitions, a result of collaboration among physics societies residing at ACP. The program loosely explores topics related to science and mathematics. A committee of four (one representative from each resident society) oversees the program and reports to the ACP Board. The committee works with guest curator, Sarah Tanguy, to select art for exhibitions. *Interstices* opens on Tuesday, November 13, with an evening reception (5:30 - 7:30 PM) featuring exhibiting artists and a gallery talk. In *Interstices*, Jim Condron, Tess Cummins, and Keith Sharp remind us through their works that the world comprises interconnected phenomena, not discrete particulates, inspiring investigation and a promise of discovery. The exhibition is open to the public during regular business hours.

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

**For past issues of this newsletter, visit the AIP Matters archives**