

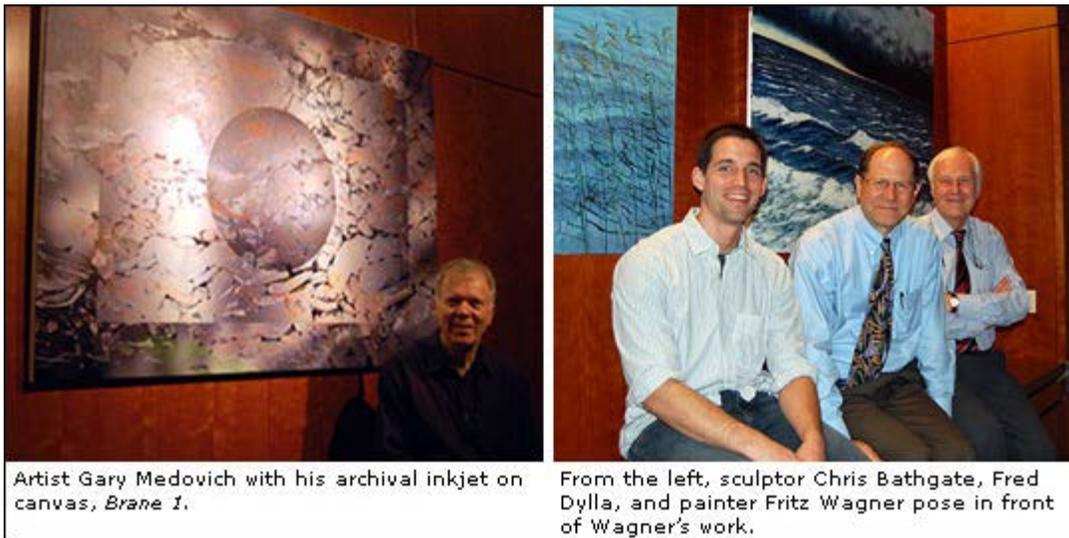


## Director's Matters

By H. Frederick Dylla, Executive Director & CEO

### Art and Science

The architects for the American Center for Physics (ACP) building in College Park, MD, designed the building's public areas as an excellent showcase for the visual arts. Thanks to efforts of the ACP Art Committee and Guest Curator Sarah Tanguy, ACP's tenants and visitors enjoy two art exhibits per year, usually involving artists who have interwoven art and science. In the story "Energy Fields on exhibit at ACP" below, you can read about the latest art exhibit, which was unveiled last Thursday. Briefly, we have three artists exhibiting through November 2010—sculptor Chris Bathgate, who draws inspiration from the geometry of machines and particle accelerators; abstract painter Gary Medovich, who weaves concepts of physics into his creations; and artist Fritz Wagner, who has been painting landscapes for as long as he has been practicing physics.



Artist Gary Medovich with his archival inkjet on canvas, *Brane I*.

From the left, sculptor Chris Bathgate, Fred Dylla, and painter Fritz Wagner pose in front of Wagner's work.

Many have written about the connection between art and science—a connection that often can go in both directions, as illustrated by the three artists in our current ACP exhibit. Wagner expanded on this connection with a lecture entitled "Physics and Art," which traced this theme from the classical to the modern in both endeavors. I have had the pleasure of knowing Fritz Wagner for nearly 35 years; we both moved from graduate studies in low-temperature physics to careers in plasma physics.

The leap from studying matter near absolute zero to producing devices that heat matter to more than 100 million degrees for fusion energy might seem like a major career change to some. However, physicists often find that expanding the scales of some parameter that describes the world becomes an essential tool for inquiry and discovery. An artist may go through a similar discovery process by transforming an

object into an image on canvas at a different scale or by juxtaposing two images in a way that contradicts what the eye perceives. In the early 20th century, we saw parallel revolutionary developments in science and art: the physicist's conception of both the cosmos and the microcosm were changed as relativity and quantum mechanics were unveiled by Einstein, Bohr, Heisenberg, and Schrödinger, just as Picasso and Braque turned the concept of perspective inside out as cubism hit the Paris salons.

For those interested in reading more about the connection between art and science, pick up a copy of *Art and Physics: Parallel Visions in Space, Time, and Light* by Leonard Shlain (William Morrow, 1993).

## PUBLISHING MATTERS

### Gaining a better understanding of the end user

Staff from AIP and several Member Societies (AGU, APS, and OSA) participated in the [2010 STM Spring Conference](#)—the annual meeting of the International Association of Scientific, Technical, and Medical Publishers—held in Cambridge, MA, April 27–29. This event, a vibrant marketplace of ideas, was a unique forum to discuss the future of STM publishing. Presentations centered on the theme of gaining a better understanding of the end user.

Many [speakers](#) discussed "power browsing," a recently coined term that refers to the way present-day scholars are using scholarly publications—they are reading more articles, but spending less time with each article. Some speakers, such as Philip E. Bourne, Editor-in-Chief of *PLoS Computational Biology*, Ramy Arnaout, CEO of [Pubget](#) and Jason Hoyt, Research Director of [Mendeley](#) raised the issue of scholars' workflow, asserting that one of the roles of a publisher is to free up more time for academics to teach and do research.



Eva Adams (right), Director of Strategy and Corporate Communications, networks with colleague Sue Maniloff of ProQuest during the STM meeting reception.

There was also agreement among conference participants that, as publishers, we should concentrate on understanding the scholarly endeavors of physical scientists, not just in the US but globally. As AIP CEO Fred Dylla pointed out, China was conspicuously absent from the discussion during these three days.

### The sweet taste of success



On Thursday, April 22, members of Publishing Technology and Online Services gathered for a celebration luncheon marking the successful launch of the Scitation C<sup>3</sup> platform in March. Evan Owens, AIP Publishing's new Chief Information Officer, joined in the festivities. The menu took on an international flair to complement the "new AIP."

Last week AIP enjoyed the sweet taste of this success when the institute was honored with a [2010 Innovation Award](#) at

the [MarkLogic User Conference](#) in San Francisco, CA. These awards recognize customers that have demonstrated outstanding leadership in their use of MarkLogic Server to build the next generation of information applications. "Winning this award is further recognition for AIP that we're in the forefront of innovation in a highly competitive world," says John Haynes, Vice President of Publishing. AIP's citation included accolades for "the Scitation C<sup>3</sup> platform which hosts 2,000,000 articles from more than 200 science-related publications, and iResearch, a mobile e-Reader application which makes scientific journal articles available on Apple's iPhone and iPod Touch devices."

Haynes attributes this outstanding success to the hard work and dedication of all members of the C<sup>3</sup> team.

## PRC MATTERS

### AIP hosts meeting of TV program partners

On Wednesday, May 5, many of AIP's partners in the [Discoveries and Breakthroughs Inside Science](#) program met at ACP for a yearly update and sessions. DBIS is celebrating its 10-year anniversary, having produced almost 1,500 ninety-second segments for local TV news stations. The science partners—now numbering 23—celebrated this anniversary at the meeting with a talk by Van R. Reiner, President and CEO of the [Maryland Science Center](#). Attendees ranged from DBIS's oldest partners, such as the American Geophysical Union, to its newest partner, the Biophysical Society. Watch the latest news from the world of science on local TV at [www.discoveriesandbreakthroughs.org](http://www.discoveriesandbreakthroughs.org).

### History Center launches major new biographical resource



Associate Historian Will Thomas (left) shows a researcher how to use ACAP.

The Center for History of Physics has launched a new online resource, the [Array of Contemporary American Physicists](#) (ACAP), which aggregates and interlinks the biographical information of more than 800 physicists who have worked in the United States since 1945. Users can trace individual career paths, or browse by institutions and awards. ACAP is a self-contained resource and points users to AIP's history resources, including online oral histories, web exhibits, photo

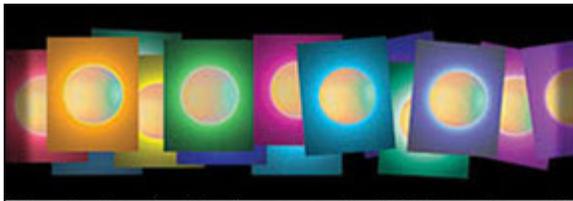
collections, and the International Catalog of Sources for History of Physics and Allied Sciences.

Development of the resource's core functionality was supported in part by a grant from the [National Science Foundation](#). Subsequent features will include topic guides that will outline histories, showing how physicists from diverse institutions are/were connected through their work. Also planned are references to history books and articles, and links to external web-based resources such as physicists' own homepages, YouTube videos, and oral histories and exhibits made available by other institutions.

## Energy Fields on exhibit at ACP

The American Center for Physics hosted its semiannual art exhibit reception Thursday, May 6, ushering in ACP's newest exhibit, [Energy Fields](#). Nearly a hundred members of the art and physics communities came together to enjoy the art, hear the artists speak about their work, and mingle with friends and colleagues. The exhibit features the work of three artists: Chris Bathgate, Gary S. Medovich, and Fritz Wagner.

"Bathgate constructs intricate machined sculptures out of aluminum, brass, bronze, copper, and stainless steel that draw on modern manufacturing machine design ... [his] passion to understand underlying principles of science, mechanics and math leads him to set up evermore complex experiments within tight parameters ... In Medovich's abstractions, we experience the rush of traveling to seemingly impossible spaces that transcend normal capacities....



Gary S. Mendovich, *Aurascapes I*, 2010; courtesy of the artist.

Inspired by recent breakthroughs in theoretical physics, he trolls his mind's eye for hidden dimensions, giving form to such phenomena as dark matter, branes and wormholes," writes, Curator Sarah Tanguy. Fritz Wagner may be better known by *AIP Matters* subscribers as Fellow of the American Physical Society and for his distinguished work in experimental physics. Yet he is also a gifted artist. Tanguy observes, "Drawn to nature's multi-faceted beauty as well as her inherent laws and symmetries, he treats each white canvas as a fresh inquiry and touchstone for his emotive response." During the reception, Wagner treated the audience to a talk on the connections between art and physics, and what both can teach us about ourselves and the world that surrounds us. Energy Fields will be on display at ACP through November 5.



Chris Bathgate, *Sp683343447521*, 2009; courtesy of the artist.



Fritz Wagner, *Poppy Field*, 1996; courtesy of the artist.

## THIS WEEK AT AIP

- Xingtao Ai, Chief Representative of AIP Global's Beijing office, visits both Melville and College Park facilities.
- Monday, May 10 (College Park) – EEO and harassment awareness training
- Thursday, May 13 (Melville) – Committee on Publishing meeting

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](#).