

- » [Subscribe](#)
- » [Contact](#)
- » [Give Feedback](#)
- » [Archives](#)

Director's Matters

By H. Frederick Dylla, Executive Director & CEO



In and out of plane sight

It is summertime and many will be spending vacation time with friends and family. If you happen to visit Washington, DC, I recommend a trip to the Phillips Collection to escape the sultry heat and drenching humidity. This small museum, built around the home of its founder, Duncan Phillips, is this country's first museum dedicated to modern art. It is a gem not to be missed.

As a scientist, I have always been attracted to the cubist style of paintings introduced by Pablo Picasso and Georges Braque in 1909-1910. Cubism's intersecting planes and lines rearrange an ordinary scene, inviting observers to wander and explore, to take a painting apart and put it back together, and to admire the whole from different perspectives. A simple shape is not so simple. An image on flat canvas can fly off into the third dimension.

Picasso immersed himself in cubism for a time and went to other artistic ventures. Braque, for the most part, made cubism his signature style throughout the rest of his life. He survived two world wars and painted nearly up to his death in 1963. Duncan Phillips was an important fan and patron of Braque, buying his first Braque painting in 1927 and adding nine others to his collection.



Georges Braque, Studio with Black Vase, 1938. The Kreeger Museum, Washington, DC. ©2013 Artists Rights Society (ARS), New York/ADAGP, Paris.

Until September 1st the Phillips Collection is hosting a special exhibit, "[Georges Braque and Cubist Still Life, 1928-1945](#)," featuring 44 paintings, all still lifes. But there is nothing still about these paintings. These paintings focus on very few objects—a vase, a mandolin, an occasional flower, etc.—but these are just props for this artist. In Braque's words:

For me, no object can be tied down to any one sort of reality . . . Objects do not exist for me except in so far as a rapport exists between them. It is this "in-between" that is the real subject of my pictures.

Given my profession as a scientist and proclivity as a tinkerer, I appreciate that Braque felt compelled to make all of his own paints. He also experimented with various additives and finishes to add texture and varying tone to the finished pigments. For example, he added grains of sand or ground glass for reflectivity. He never covered the entire surface of his finished painting with the usual varnish layer

used on most oil paintings. Instead, he might add beeswax or varnish to just one pigment to allow that surface to pop from the canvas with a satin finish. He was painstaking, sometimes taking two years to finish a painting, with meticulous sketching before his brush hit the canvas. Paint-overs and paint removals were also part of his process.

For those interested in the archaeology of Braque's paintings, the Phillips exhibit includes a section that shows some of his paintings illuminated with infrared or ultraviolet, or dissected into elemental components with x-ray fluorescence spectra.

If you enjoy the intersection of geometry and art, The Phillips Collection also features an [exhibit by Ellsworth Kelly](#). At age 90, Kelly was awarded the National Medal of Art by President Obama earlier this month. You can learn more about his work and what's on display at Phillips in last week's [NPR story](#). Listen, or better yet, stop by and see for yourself.



Ellsworth Kelly, Yellow Relief over Red, 2004. Private collection. Photo: Jerry L. Thompson, courtesy of the artist. ©Ellsworth Kelly.

From AIP Publishing

Applied Physics Letters and *APL Materials* in Stockholm



AIP Publishing's journal manager, Stella Kafka, attended the [20th Central European Workshop on Quantum Optics](#) that took place at the Royal Institute of Technology (KTH) in Stockholm, Sweden, from June 16-21. *Applied Physics Letters (APL)* and *APL Materials* were co-sponsors of the meeting. Kafka had the opportunity to meet with conference participants, discuss various aspects of AIP journals, learn about the latest research advancements in quantum optics and quantum information, and invite scientists to submit their work to *APL*.



Physics Resources Matters

Physics Today introduces "Enterprise"

In July, *Physics Today* online introduced a new department, called "[Enterprise](#)," to provide a source for news and commentary about physics in the private sector. Its first article, [Lighting a Path to Innovation and Prosperity](#), calls attention to the National Photonics Initiative (NPI) and the importance of a strong US investment in developing new optical technologies. Read the article to see the integral, collaborative role that five societies—two of which are Member Societies (OSA and APS) and two Affiliated Societies (LIA and SPIE)—played in the formation of the NPI, and its subsequent [white paper](#) outlining its recommendations for



continued federal support.

Member Society Spotlight

APS reinforces its commitment to Physics Education Research

In the spring APS introduced its newest topical group, the [Topical Group on Physics Education Research](#) (GPER), concerned with the learning and teaching of physics. It will advance knowledge of “studies ranging from individuals to institutional practices, from neural and cognitive processes to social and contextual components of education, from basic research to educational practices in physics.” See “[Introducing GPER](#),” an article featured on *Physics Today* online, written by founding members of GPER.

Coming Up

July 13-17

- AAPT Summer Meeting (Portland, OR)

July 16-18

- CESSE Annual Meeting (Providence, RI)

July 18

- NUKEMAP 3D debut at the Center for Non-Proliferation Studies, 10-11:30 a.m. (Washington, DC)

July 20-24

- ACA Annual Meeting (Honolulu, HI)

July 23

- Quarterly Ice Cream Social (Melville, NY)

July 26

- Learning together: Business article review (Melville, NY)

July 29-30

- MMM Conference (College Park, MD)

July 30

- Melville staff: 2013 Marcum Workplace Challenge (Jones Beach, NY)

August 6

- SPS Interns Closing Program (College Park, MD)

August 7

- ACP brown bag lunch lecture. “LANL’s 70th Anniversary—Looking Back, Looking Forward,” given by Charlie McMillan, director of Los Alamos National Laboratory (College Park, MD)