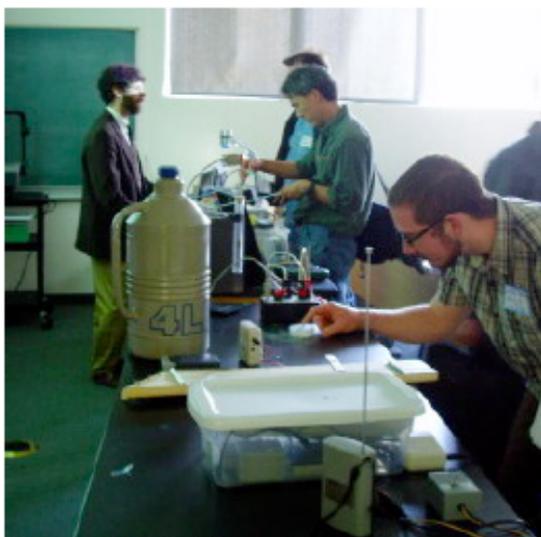


## SCAAPT Spring 2008 Meeting

The Spring Meeting of the Southern California Section was held Saturday, March 29 at Pomona College in Claremont, California. Special thanks to the local host, David Tanenbaum, for arranging the meeting site and to the Pomona College Physics Department for providing coffee, fruit, and pastries. Approximately 40 people attended.

The meeting began with a workshop: "Downloading and Editing Internet Video for Use in a Physics Class" led by Gary Reynolds. The workshop provided hands-on experience searching the internet for useful video clips. Participants learned how to download clips, reformat them for editing, and edit them. Those attending the workshop were able to store their edited clips on flash drives or cd's for convenient use in the classroom.

Dr. Dwight Whitaker from Pomona College gave the morning invited talk "Rapid Motion in the Plant Kingdom: Nature's Weapon's of Mass Reproduction" Dr. Whitaker described how plants and fungi have developed a number of remarkable methods for the rapid dispersal of seeds and spores and how the most rapid movements come about from the sudden release of stored elastic energy. He showed several high-speed video images of these processes and discussed the biomechanical models developed to isolate the key features required for rapid motion and to assess how effective each plant is at its particular dispersal mechanism. The results of these analyses are combined with observations from the field and comparisons with similar species to gain insight into the adaptive significance of these extraordinary methods of reproduction. He described several methods of seed and spore dispersal from a variety of plant species, including the explosive launch of bunchberry pollen, the slingshot seed dispersal of Impatiens, and the exploding spore capsules of Sphagnum moss. For more about his work and a sample of his videos, please see <http://www.williams.edu/go/explodingflower/>.



Dr. David Tanenbaum shows some of the lab equipment that can be checked out from the CIPT lending library.

Dr. David Tanenbaum from Pomona College presented the afternoon invited talk "Cornell Institute for Physics Teachers: A Lending Library for Class Sets of Laboratories Designed for High School Teachers" Dr. Tanenbaum's talk concerned the CIPT project, a nation wide resource for high school physics teachers supported by both the NSF and New York State. Libraries exist in several locations around the country, with the largest sites being hosted by Cornell in New York and Pomona College in California. He described the training workshops which are run to introduce teachers to the labs. The high school teachers can either assemble the lab equipment from parts lists, buy it from vendors, or check it out from the libraries. Dr Tanenbaum highlighted some of the laboratories that are available and described the process of teacher training and the development of new laboratories. For more information go to <http://www.cns.cornell.edu/cipt/index.html>.

A special event of the afternoon session was a planetarium show and astronomy software demonstration presented by Dr. Bryan Penprase of Pomona College. He demonstrated some of the available software, including a set of java applets for simulating apparent motions of the stars and planets, a desktop planetarium program with a catalog of 200,000 stars which

also enables "fly-throughs" of the solar system and nearby universe, and programs for viewing large assemblies of particle positions which can be used to visualize the largest structures in the universe. Dr. Penprase concluded his presentation with a quick sky show illustrating some of the capabilities of Pomona College's Millikan Planetarium and provided some updates on upcoming events in the sky. The Pomona College astrophysics simulations can be found at <http://galileo.astro.pomona.edu/common/Simulations/>

The ever popular Show 'n' Tell featured demonstrations by Gary Reynolds, Ertan Salik, Forouzan Faridian, and John Mallinckrodt.

The following contributed talks were presented:

"Flight of the Wandering Albatross" Bob Coutts, UCLA

"Calculus Based derivation of Simple Harmonic Motion" Martin Hoecker-Martinez, Mt. San Antonio College & Harvey Mudd College

"Ion Propulsion Simulation and the NASA Dawn Mission" Joe Wise, New Roads School

"Measuring Relative Phase Shift Incurred Upon Total Internal Reflection" Ertan Salik, Cal Poly Pomona

"History and Reality of the International Young Physicists Tournament" Tengiz Biblashvili, Wildwood Secondary School

There was a brief business meeting where the PTRA initiatives and other news from AAPT were discussed and elections were held. The following officers were elected:

President:	Bill Layton
Vice President for High Schools:	Bob Baker
Vice President for 2-year Colleges:	Fred Carrington
Vice President for Universities:	Jeff Phillips
Past President:	Nuria Rodriguez
Treasurer/Secretary	Forouzan Faridian
Web Manager	John Mallinckrodt
Section Representative:	Mary Mogge

The meeting ended with our World Famous "Order of Magnitude Contest." This meeting's question was: (A variation on an oldie, but goody!) "How many sheets of paper would it take to cover your share of the Earth's surface?" The answers ranged from 0 to  $10^{58}$ . Alex Small and Dean Papadakis submitted the median entries of  $10^4$  and  $10^5$ , respectively. Alex selected a \$50 gift certificate from Vernier as his prize. Dean chose a GoMotion from Vernier. Door prizes were won by Paul DeVoe (Vernier gift certificate), Marilyn Usher (*The Flying Circus of Physics* by Walker from Wiley), and Tengiz Biblashvili (*The Flying Circus of Physics* by Walker from Wiley). We thank our corporate sponsors – Vernier and John Wiley & Sons, Publishers – for their support and donation of door prizes.

The Southern California Section will hold its Fall Meeting in late October or early November. Please bookmark the SCAAPT URL <http://www.scaapt.org/> and check for the date in early Fall.

Mary Mogge, Section Representative

## Southern California Section