

FALL DEMO NIGHT 2008

The Southeastern Pennsylvania section of AAPT met on Friday night Oct 17 at Sun Valley HS for our annual **FALL DEMO NIGHT**.

Thanks to Marc Baron, our host at Sun Valley, for organizing and hosting the event, providing dinner, and showing us the capabilities of their Planetarium at the end of the evening.



The officers met before dinner and decided on **April 24 / 25** (Fri/Sat) for the **Spring two-day SEPS/AAPT meeting** which will be held at Villanova University. Our host will be Phil Maurone.

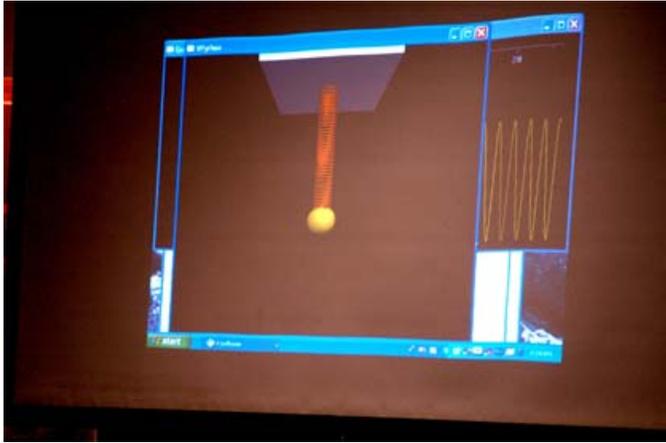
We are in the process of inviting guest speakers and planning workshops.

If you would like to serve on a Planning Committee for the spring event, please contact our Planning Committee Clerk, Deb Goldader at Friends' Central School. Deb can be reached at

We had a number of contributed talks and demos featuring our own SEPS members, as outlined below.

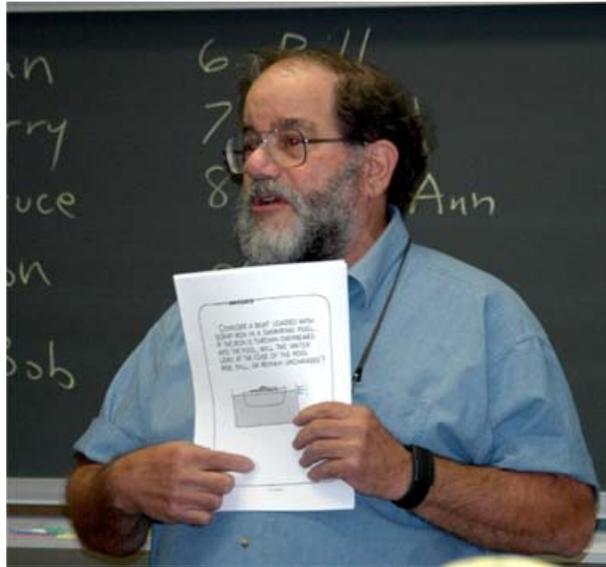
Fran Poody - East HS, West Chester

Fran showed us **Vpython**, an object-oriented programming language that is fairly simple to learn and which allows teachers and students to create 3-d visualizations of physics phenomena. The advantage of using a computer is that the computer is perfectly happy to re-calculate a position over and over and over again, so you can show what will happen in a 3-body gravitational system, for example, though you wouldn't be able to solve it using calculus. In addition, you can learn to use Vpython and learn a more modern take on introductory physics by taking Bruce Sherwood's *Matter and Interactions* course through distance learning at NCSU.



Barry Feierman - Westtown School

Barry demonstrated buoyancy principles using a toy ship (Styrofoam boat) carrying an extra weight floating in a big beaker of water. When the cargo is "thrown overboard" into the water, does the water level in the beaker rise, fall, or remain the same? This was a question from one of Paul Hewitt's texts.



Bruce Williamson - Delaware Valley Friends School, Paoli

Bruce showed a magnet falling through a tube and then some fascinating things you can do with a can and some methane gas. This was a “wow” moment as he lit up the front of the room.



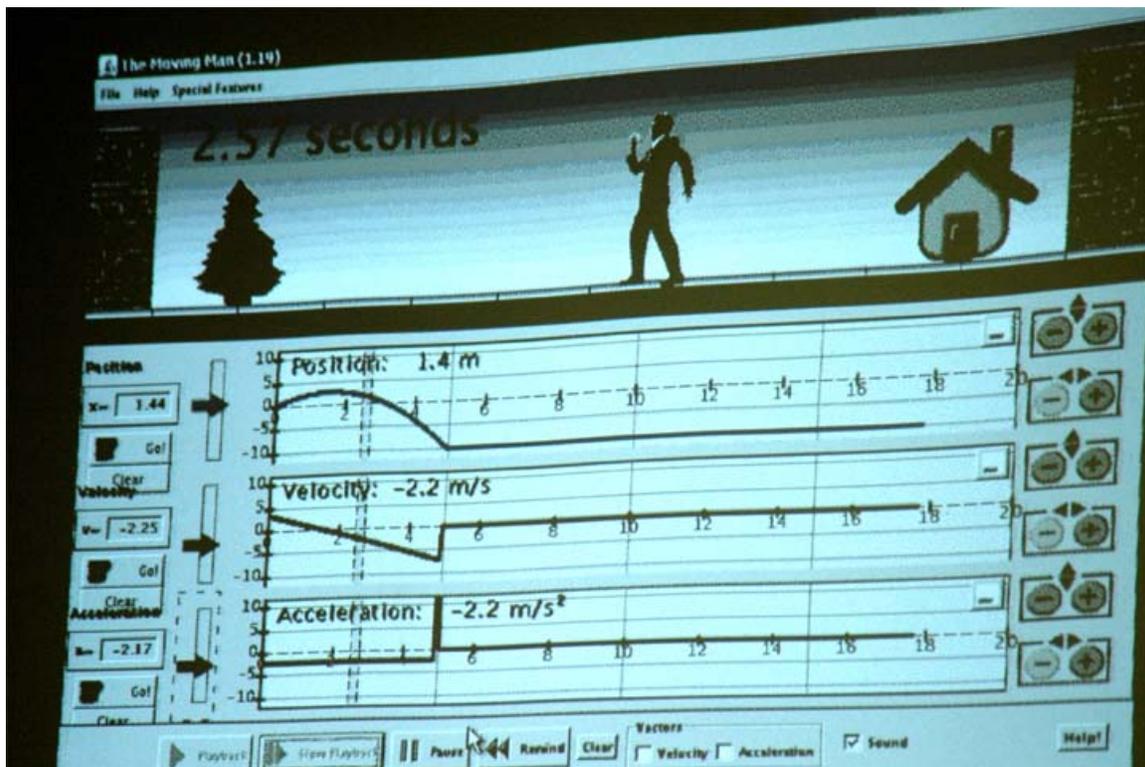
Ron Pedelty - East HS, West Chester

Ron Pedelty of East HS in West Chester demonstrated various aspects of musical tones, resonance, and taught us how to sing “two tones simultaneously”. You’ve got to try this!



Bob Schwartz

Our next speaker was Bob Schwartz of Harriton HS. Bob had a number of LASER demonstrations showing color from a variety of reflecting surfaces. He also showed us PHET, an internet motion simulation package.



A sample "Moving Man" screen shot:

Liz Chesick - Baldwin School, retired

Liz talked to us about national AAPT concerns as she is now the national high school representative on the AAPT Board.



David Fenimore - Coatesville HS

David showed us a very nice way to demonstrate the eddy effects of a magnetic ball moving through a metal tube posing some interesting questions related to how the retarding forces work. This tube was transparent so you could SEE the ball slow down as soon as it hit the metal surface.



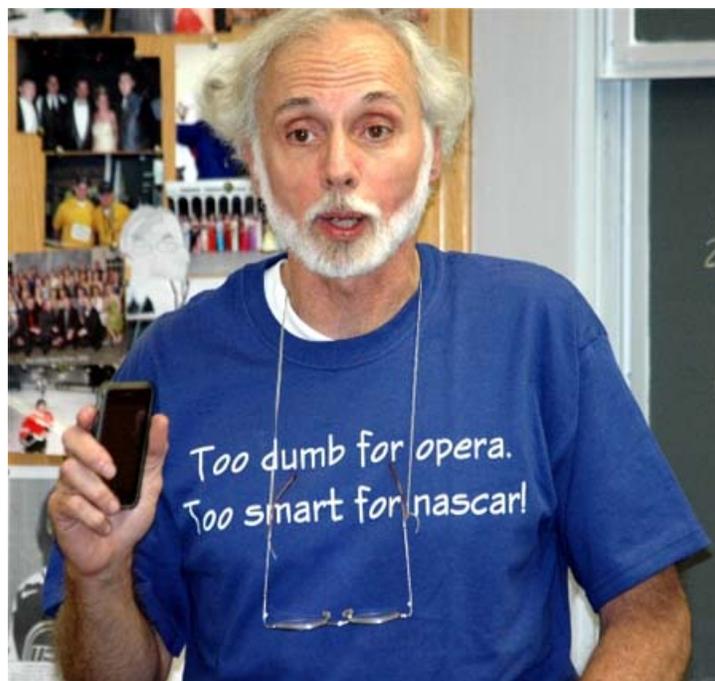
Bill Berner - U.Penn

Bill reminded us about his annual Physics Show for high school students at U.Penn which this year will feature a series of demonstrations on motion and mechanics. Sign up early for this superb set of demonstrations.

Dates: Monday Dec 8 two shows: 9:30 – 11:30 and 12:00 – 2:00 pm
Tuesday Dec 9 two shows: 9:30 – 11:30 and 12:00 – 2:00 pm

Contact Bill directly at berner@physics.upenn.edu for reservations.

Bill went on to show a very unsophisticated demonstration of forces and vectors using a broom to push a moving bowling ball into a circle. This was developed by a team at U.Penn for their summer work with talented high school students. He then showed us some very cool ways to use modern technology i-touch and i-phones with our physics classes.



Mary Ann Klassen - Swarthmore College

Mary Ann did a demonstration with a magnetic cylinder rolling down a heavy copper plate but showed that when the plate was chilled by liquid nitrogen something very unusual happens due to the lowering resistance of the copper conductor at lower temperatures.



Jeff Wetherhold - Parkland HS, Allentown

Jeff is our resident video expert, but this time showed off some very cool ties that all Physics teachers should own.

Jeff started making physics ties to tie in with the lessons he teaches. He use solid color ties and fabric paints. He is selling them for \$10.00.

Jeff also shared some insight on teaching lower levels of physics.

“Don't be afraid of doing this. I have discovered that teaching this level makes you feel like a real teacher. The kids are wonderful and very appreciative of what I do.”



Again, thanks to our host, Marc Baron of Sun Valley High School for hosting this fine event.

Submitted by Barry Feierman, Westtown School
Corresponding Secretary SEPS/AAPT and photographer