

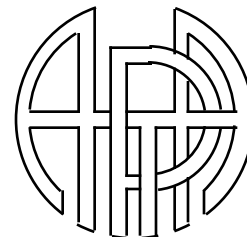
# AMERICAN ASSOCIATION OF PHYSICS TEACHERS

Spring 2003 meeting of the Southern California Section

Saturday, May 3, 8:15 AM–4:30 PM

La Fetra Hall, Mainiero Building, University of La Verne—1950 Third St., La Verne

Local Contact: Sarah Johnson, <johnsosa@ulv.edu> 909-593-3511 x4432



8:15 AM <b>Registration, Refreshments, Exhibits</b>	1:10 PM <b>“Show and Tell”</b> Francisco Izaguirre, Alan DeWeerd, others?
8:30 AM <b>Workshop</b> “Computers in Physics Education” Leader: Fred Goldberg, SDSU	1:40 PM “Home Activities on Electrical Energy Use” Harvey Leff, Cal Poly Pomona
10:00 AM <b>Welcome and Introductions</b>	1:55 PM “Intro to Pumas: A Vehicle for Teacher/Researcher Interaction” Mark Helmlinger, JPL
10:15 AM “Efforts to Establish a HS Physics Teacher Network” Bill Layton, UCLA	2:10 PM <b>Invited Talk</b> “More Than You Wanted to Know about High School Physics Standards” Dean Baird, Rio Americana High School
10:30 AM <b>Progress Report</b> “Physics First: Successes and Challenges” John Spiegel, Dan Lavine, Bill Pearson	3:00 PM <b>Panel Discussion</b> “Preparation of Physics Educators” Fred Goldberg, Dean Baird, Bill Layton
11:00 AM <b>Invited Talk</b> “Physics for Elementary Teachers: Focusing on Students’ Ideas” Fred Goldberg, SDSU	3:50 PM “Let Robots Teach Your Students Electromagnetism” Murray Kucherawy, Polytechnic School.
11:50 AM Announcements	4:05 PM <b>Order of Magnitude Contest &amp; Door Prizes</b>
12:00 <b>Lunch</b> ULV Cafeteria	4:20 PM Closing Remarks/Meeting Adjourns

#### *Workshop:*

#### **“Computers in Physics Education”**

Leader: Fred Goldberg, San Diego State University

#### *Invited Talk:*

#### **“Physics for Elementary Teachers: Focusing on Students’ Ideas”**

Fred Goldberg, SDSU

Physics for Elementary Teachers (PET) is new 60-hour, one-semester course for prospective elementary teachers (or a 100-hour workshop for practicing elementary teachers). The main goals of the course are to help the students develop a deep conceptual understanding of physics ideas, to help them be aware of their own learning of those ideas, and to help them connect their own ideas with ideas that could be developed by children in elementary school. Students in the course spend class time engaged in small group and whole class discussions about making sense of physics phenomena observed with hands-on and MBL experiments, and computer simulations. Web-based homework activities include using computer simulations to supplement classroom activities, and to observe and analyze video of elementary students grappling with ideas similar to those the college students have been learning during class. The course pedagogy builds on the previous CPU (“Constructing Physics Understanding”) project.

\*Supported by NSF Grant ESI-0096856; co-PIs are Steve Robinson and Valerie Otero

#### *Invited Talk:*

#### **“More than you wanted to know about High School Physics Standards”**

Dean Baird, Rio Americana High School

Do you know what the State of California wants you to teach? What the difference is between Content Standards and ‘Opportunity to Learn’ Standards? How about the difference between Science Standards and the Science Framework? Do you know how your students are being tested on Physics Standards and how their performance impacts your school’s Academic Performance Index? And what happened to the Physics Golden State Exam? If you’re feeling bewildered by any of this, I hope to provide some measure of enlightenment.

#### *Progress Report:*

#### **“Physics First: Successes and Challenges”**

John Spiegel, Crawford HS; Dan Lavine, Mission Bay HS; Bill Pearson, Bell Junior HS

In Spring 2001 San Diego City Schools changed their graduation requirement for incoming 9th graders from 2 years of science to 3 years. In addition, the district re-sequenced their course sequence to physics, chemistry, and biology. After a pilot year of using the Active Physics curriculum for 9th grade physics, full implementation of 9th grade physics began in fall 2002. This presentation will focus on the successes and challenges of this re-sequence, including teacher professional development, supporting out-of-discipline teachers, teacher attitudes and beliefs, and student struggles and achievement.

#### **What’s the Order of Magnitude Question?**

“How many visible wavelength photons from Pluto enter your eye each second?” As always, you are free to interpret the question *any* way you like, but remember: The winner—*i.e.*, the person with the *median* answer—gets first pick of the door prizes! Must be a member and must be present to win.

#### **What’s for lunch?**

The University cafeteria will be open for our use and there are off campus options within easy walking distance.

#### **Show’n Tell!**

There’s still time available. Share a favorite demo with your friends.

#### **Grateful thanks to our commercial supporters!**

Sargent Welch/Cenco (Don Taves, + \$50 gift certificate), Bedford / St. Martin’s, W.H. Freeman & Company and Worth Publishers (Robert Delmonte), Science Kit, (Tara Craig), Thomson Learning/Brooks-Cole, Prentice Hall (Dewhanne Nyivih and/or Kirsten Pert, + ActivPhysics II CD-ROM), Vernier Software & Technology (+Gift Certificate), Addison Wesley/Benjamin Cummings (+Door Prize)

#### **Future meetings (Mark your calendars)**

AAPT Summer 2003, Madison, WI August 2-6, 2003

SCAAPT Fall 2003, TBA

A. John Mallinckrodt  
Physics Department  
Cal Poly Pomona  
3801 West Temple Avenue  
Pomona, CA 91768

**ADDRESS CORRECTION REQUESTED**



## AMERICAN ASSOCIATION OF PHYSICS TEACHERS

Spring 2003 Meeting of the Southern California Section  
Saturday, May 3—University of La Verne—[www.ulv.edu](http://www.ulv.edu)

### How do I get to the meeting?

The University of La Verne is located in La Verne, about 20 miles east of Pasadena between the 10 and the 210 freeways.

**From the 210**, exit and go south on Fruit (which turns into White) and turn right on Third St.

**From the 10** exit and go north on Fairplex to the L.A. County Fairgrounds. Turn left and follow Fairplex along the perimeter of the fairgrounds, continuing north on E St. past the traffic signal and turn left on Third St.

**See maps** at the ULV website [www.ulv.edu](http://www.ulv.edu)

**Parking** is free on 3rd St. Don't park in the University lots but city lots are O.K.

The meeting will be held in La Fetra Hall, Mainiero Building on 3rd Street, between B and C Streets. The morning workshop will be in Mainiero Room #60.

### Where do I pay?

Section dues are just \$10/year and are our primary source of support; we receive nothing from the national organization. Members get final programs before the meeting and are eligible for great door prizes. See the SCAAPT website for how to sign up by mail or do it at the meeting. We need your support! Please help introduce us to your school or district colleagues. Bring a new teacher. Heck, bring an old one!

### Subscribe to the SCAAPT email list

For members *and* nonmembers. (We think you'll join eventually!)  
Send a message to

[listproc@listproc.csupomona.edu](mailto:listproc@listproc.csupomona.edu)

with the single line:

subscribe scaapt <name>

(replacing "<name>" with your first and last name!)

### Submit a Change of Address Online

You may submit changes of address using the online form available via a link from the section website or directly using

[http://www.csupomona.edu/~ajm/scaapt/ch\\_add.html](http://www.csupomona.edu/~ajm/scaapt/ch_add.html)

**Visit the SCAAPT website** For meeting information, a list of section officers and contacts, link to the national AAPT, etc.

<http://www.csupomona.edu/~scaapt>

### SCAAPT Officers 2002-2003

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