

AMERICAN ASSOCIATION
OF
PHYSICS TEACHERS

Spring 1993 Meeting
of the
Southern California Section
Joint Meeting with the
Society of Physics Students, Zone 18

Saturday, 1 May 1993
Grant High School
13000 Oxnard St., Van Nuys

Local Host:
Fred Carrington
days: (818) 781-1400

John Mallinckrodt, Editor
So. Cal. Section AAAPT
Physics Department
Cal Poly Pomona
Pomona, CA 91768

ADDRESS CORRECTION REQUESTED

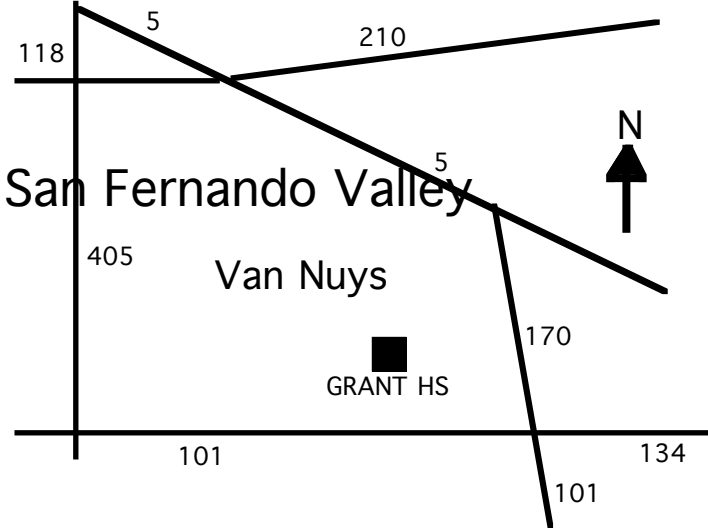
PRESORTED
FIRST CLASS
U. S. POSTAGE PAID
Permit No. 1
Pomona, California



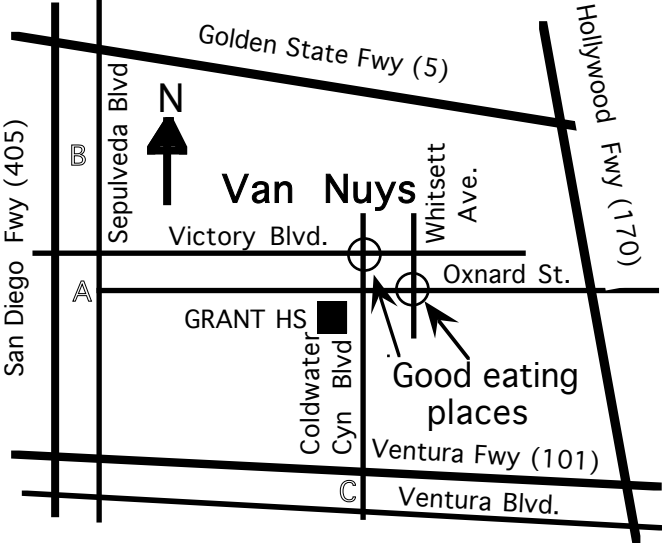
eves: (818) 886-4654

Freeway and Area Maps

Freeway Map to Grant



Map to Grant High School



Southern California Section AAPT Officers

President

Harvey Leff
Physics Department
Calif. State Poly. University
Pomona, CA 91768
(909) 869-4013
hsleff@csupomona.edu

Historian & Test

Administrator
Walter Ogier
8555 San Gabriel Road
Atascadero, CA 93442
(805) 466-1328

Vice President

Willa Ramsay
Lincoln Preparatory H S
150 So. 49th Street
San Diego, CA 92113
(619) 286-0489

Section Representative

Lester Hirsch
Physics Department
California State University
Los Angeles, CA 90032
(310) 274-2795

Vice President, High Schools

Fred Carrington
Grant High School
13000 Oxnard Street
Van Nuys, CA 91401
(818) 886-4654

Immediate Past President

Roger Ludin
Physics Department
Calif. Poly. State University
San Luis Obispo, CA 93407
(805) 772-1723
di550@oasis.calpoly.edu

Secretary

Robert Alt
Physics Department
Cal State Dominguez Hills
Carson, CA 90747
(310) 516-3404
ralt@dvhx20.csudh.edu

Editor

John Mallinckrodt
Physics Department
Calif. State Poly. University
Pomona, CA 91768
(909) 869-4054
ajmallinckro@csupomona.edu

Treasurer

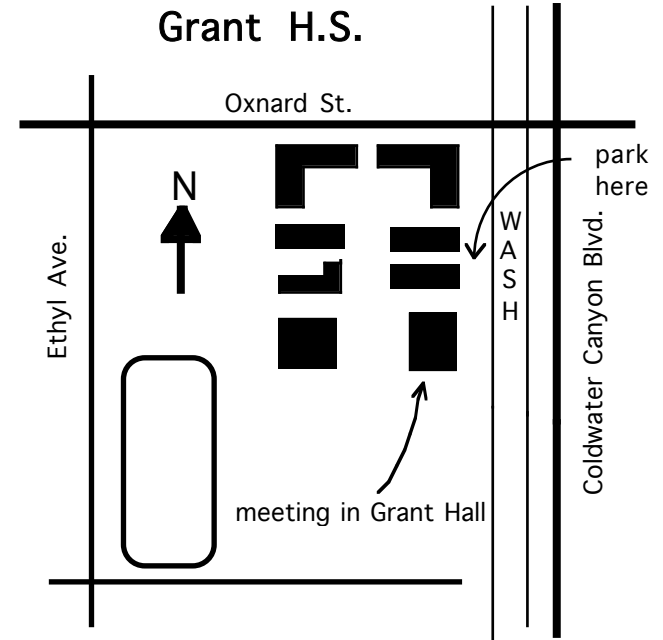
Fernando J. Lopez-Lopez
Southwestern College
900 Otay Lakes Rd.
Chula Vista, CA 91910
(619) 421-9791



Meeting Notes



Campus Map



Places to Stay

- A. *The Carriage Inn*, 5525 Sepulveda Blvd., Sherman Oaks
(818) 787-2300 \$59 + tax
- B. *Chalet Lodge*, 6909 Sepulveda Blvd., Van Nuys
(818) 787-5400 \$45 + tax
- C. *Sportsmen's Lodge*, 12825 Ventura Blvd., Studio City
(818) 769-4700 \$98-108 + tax



INVITED TALKS

“AAPT Programs and Their Impact on Physics Teaching”

Jim Stith, U. S. Military Academy, West Point
Immediate Past President AAPT

Recent years have seen a significant rise in AAPT's involvement in programs on a National and International scale. In addition to our Section and National meetings, these efforts range from the traditional “Department Chairs Conferences” to the “U.S. - China - Japan Conferences.” This talk will review some of these initiatives and their possible implications for physics teaching.

“The Interface of Physics Lecture Demonstrations with State of the Art Media”

John Davis, University of Washington
Founding president of PIRA and Contributor to the
Video Encyclopedia of Physics Demonstrations

Physicists have used lecture demonstrations for centuries to show students and others nature in action. Can a traditional teaching tool, such as lecture demonstrations, be improved upon? Video media in the form of laser disc technology does allow for significant demonstration enhancements. Several examples from each mode will be presented.

“SHOW AND TELL”



A constant attraction of our meetings is the “Show and Tell” session. There is still time to get a favorite demo together and share it with others at the meeting.

Extra Textbooks?

Is your office bulging with books you don't want or need? Duplicate or older desk copies? Are you a generous person who would like to share your excess reading material with others? Please bring unwanted books to the meeting where they will be made available to high school teachers.



**You've got to pay your *dues*
if you want to get the *news*.**

Please take this opportunity to support the Southern California Section AAPT. (If you are a member of the National AAPT please remember that the So. Cal. Section gets exactly *zero* percent of your annual national dues!)

Regular member dues are \$10/year or \$25 for three years. Students memberships are \$3/year. Mail checks to Fernando Lopez-Lopez, Southwestern College—Department of Physics, 900 Otay Lakes Road, Chula Vista, CA 91910. Please include your name, address, city, state, school, home and/or office phone #, and status (faculty, staff, student, or other.) Thanks!

If you have a *brief* message of interest to the physics teaching community in Southern California, call John Mallinckrodt, (909) 869-4054 for space in the meeting announcements.

Announcements?



Things to do



Join the national AAPT!

Are you a member of the national AAPT? If not, you are missing out on a *good* thing! Members receive *Physics Today* monthly and the *AAPT Announcer* quarterly, plus either *The Physics Teacher* or the *American Journal of Physics*, or both. There are special low membership rates for students. You can request an application form by sending a postcard to AAPT Membership Dept., 5112 Berwyn Road, College Park, MD 20740.

Give a talk!

Our meetings are informal and offer excellent forums for sharing new ideas on teaching and learning. Get those creative juices flowing and tell us all what you've been up to!

Host a meeting!

The executive board is always looking for people who would like to host a meeting. Having the meetings move to new locations gives members a chance to see different campuses. If you would like to showcase your campus, let someone on the executive board know.

Serve as an officer!

We are always interested in knowing of people who would make good officers for our section. If you have a

desire to serve or know of someone who would do an excellent job, let us know.

Highlights



LUNCH

We will be going off campus for lunch. Our host will provide a list of local restaurants at the meeting.

THANK YOU EXHIBITORS!

Many thanks to our exhibitors and/or door prize contributors including (as of press time) PASCO Scientific. Exhibitors will display their wares in the meeting room.

DOOR PRIZES!!

As always door prizes, generously donated by our exhibitors and other vendors, will be given away to those in attendance at a drawing to be held in the afternoon.

ORDER-OF-MAGNITUDE QUESTION

Consider a line formed by taking all of the atoms in the tip of the little finger (from the last knuckle on) and placing them “side-by-side.” (What an image!) Estimate the number of times that this line would encircle the earth. A prize goes to the person (attending the award ceremony) whose estimate is the median of all entries received. (In the event that the would-be winner is not present, that person’s estimate will be withdrawn; in the event of an even number of entries the Editor’s estimate will be withdrawn.)

AMERICAN ASSOCIATION OF PHYSICS TEACHERS

Meeting of the Southern California Section—1 May 1993

Grant High School, Van Nuys—Host: Fred Carrington

Meeting Place: Grant Hall

MORNING SESSION

- 8:00 Registration, Exhibits, Coffee, and Doughnuts**
- 9:00 Welcome**
Fran Martinez, Asst. Principal, Grant H.S.
- 9:10 “AAPT Programs and Their Impact on Physics Teaching”**
Jim Stith, Immediate Past President AAPT
U. S. Military Academy, West Point
- 10:00 Coffee Break, Exhibits, Late Registration**
- 10:30 “Gauss”**
Fernando Lopez-Lopez, Southwestern College
- 10:45 “Superfluidity: Something Solid at Last After Thirty Years of Undergraduate Research Participation”**
Walter Ogier, Pomona College (retired)
- 11:00 “Calculating ‘c’ from Jupiter’s Moon Io Using Floppy Almanac Data”**
Richard Kenealy, East L.A. College (retired)
- 11:15 “Studying Newton’s Laws in the Lab Using Microcomputers”**
Charles Hollenbeck, Chaffey College
- 11:30 “Show and Tell”**

Greg Darakjian, Harry Manos, Nick Brown, and others.

- 12:00 Lunch**
On your own at a local eatery

AFTERNOON SESSION

- 1:30 Business Meeting/Election of Officers**
- 1:45 “The Difficult Triangle”**
Fernando Lopez-Lopez, Southwestern College
- 2:00 “Demonstrating Electromagnetic Waves Using a T.V. Set”**
Harry Manos, Schurr High School
- 2:15 “Transcendental Measurementation”**
Jason Foat and Peter Siegel, Cal Poly Pomona
- 2:30 “Cosmology for Kids: Strategies for Introducing Cosmology to Advanced High School and Undergraduate Physics Students Using a Computer-Based Tutorial and Digital Image Processing Activities”**
Jatilla van der Veen, Camarillo High School
- 2:45 “Update on the Remote Access Astronomy Project of U.C. Santa Barbara”**
E. O’Connor, U.C. Santa Barbara

3:00 **Order of Magnitude Contest Winner and
Drawing for Door Prizes**

3:10 **“The Interface of Physics Lecture
Demonstrations with State of the Art
Media”**
John Davis, University of Washington“?”

4:15 **Meeting Adjourns**

