

AMERICAN ASSOCIATION  
OF  
PHYSICS TEACHERS

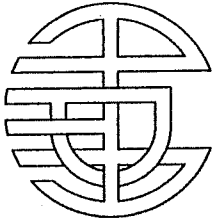
Fall 1997 Meeting  
of the  
Southern California Section

Saturday, November 1, 1997  
Royal High School  
1402 E. Royal Ave.  
Simi Valley, CA 93065

**Local Host:**  
**Keith Barker**  
"Kebark@aol.com" (805) 522-1773

Steve Cooperman, Editor  
*Socal AAPT*  
Science Department  
Westridge School  
324 Madeline Drive  
Pasadena, CA 91105-3399

ADDRESS CORRECTION REQUESTED

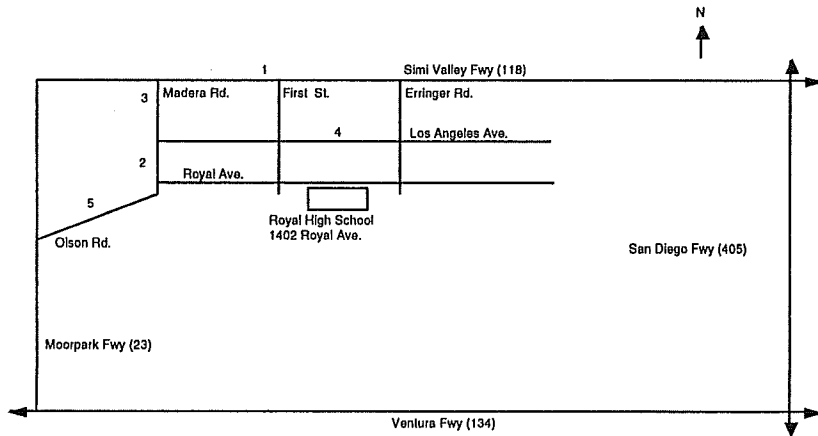


Address  
Label

# Freeway Map to Royal High School

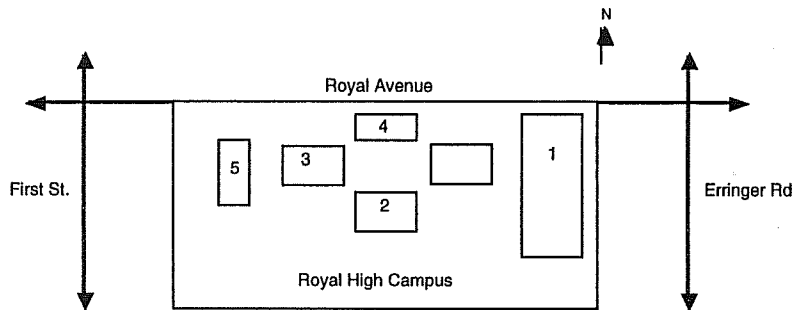
## Directions

Head north on the 405 or the 5 until it meets the 118. Go west, into Simi Valley, until you meet the Effinger, First or Madera offramps. Turn south to Royal Avenue. (If you go north on the 23, go east once you reach the 118.)



- 1 Radisson Hotel, \$69 AAA rate, (800) 333-3333
- 2 Posada Royale, \$67 AAA rate, (800) CLARION, Elephant Bar Next Door
- 3 Marie Callender's & Chili's Restaurants
- 4 Assorted Fast Food Restaurants
- 5 Ronald Reagan Presidential Library

## Campus Map



- 1 Parking
- 2 Library, SCAAPT Meeting
- 3 Rm 5-3, Physics Classroom
- 4 Administration
- 5 Rm 9-3, Interactive Physics Workshop

## Motels/Hotels

**Radisson Hotel -- Simi Valley (1 on map)** (800) 333-3333  
 999 Enchanted Way (805) 583-2000  
 AAA Rate, 1P \$69, 2P/2B \$69

**Rosada Royale / Clarion Hotel (2 on map)** (800) CLARION  
 1775 Madera Rd. (805) 584-6300  
 AAA Rate, 1P \$76-96, 2P/2B \$86-106

## Lunch

*El Pollo Loco* lunches will be available on site. For \$6, lunch includes two pieces of chicken, rice, beans, and a drink. Contact Keith Barker by (805) 522-1773 or by e-mail, "Kebark@aol.com".

Other popular luncheon places in the immediate area of Royal High School are below. For directions, check the map on page 2. There will be a more complete listing for you to look at when you register, including addresses and phone numbers.

## Marie Callender's and Chili's Restaurants (Area 3 on map)

### Assorted "Sit-down" / Fast Food / Dessert Restaurants (along area 4, within 0.64 mi):

Baskin Robbins 31 Ice Cream, Boston Market, Burger King, China Express, Ciao Italian & French Restaurant, Coco's Family Restaurant, Jack In The Box Family Restaurant, La Fuente Mexican Restaurant, McDonald's Restaurant, M V P Sports Bar & Grill, Peking Garden, Rube's Valley House Bar B Que, Shakey's Pizza Restaurant, Sizzler Restaurant, Subway Sandwiches & Salads, Taco Bell, Wendy's Old Fashioned Hamburgers, Der Wienerschnitzel

## Workshops

**8:30-10:00**

Call Mary Mogge, (909) 869-4023, or write to her at:  
"emogge@csupomona.edu" to reserve your spot!

### Workshop #1

**"A Hands-On Workshop with the CBL and CBR",  
sponsored by Vernier Software, presented by Dick Vinetz**

This workshop will feature the new CBR Motion Detector that hooks directly to any TI calculator.

### Workshop #2

**"Computer Interfacing for all Sciences, inside and  
outside the lab",  
sponsored by PASCO, presented by Charles Witsch.**

### Workshop #3

**"Using Interactive Physics in the Classroom",  
presented by John Mallinckrodt**

Workshop participants will learn how to create simulations using the "Interactive Physics" software from *Knowledge Revolution*. We will also discuss issues that arise in using the software effectively for in-class demos and student assignments. Examples of the workshop leader's work with IP can be found at:

"<http://www.intranet.csupomona.edu/~ajm/>".

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## LOCAL PHYSICS TEACHER ALLIANCES

We encourage the local alliances to use *AAPT* meetings to recruit new members and to report on activities. If you have news of your alliance or would simply like to announce your next meeting, please contact Bill Layton, so we can schedule time for your announcement. *Thanks!*

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## Meeting Highlights

### **"SHOW AND TELL"**

A major highlight of our meetings has always been your demos. They inspire your colleagues as well as your students. Everyone should participate! Bring your single most special Physics demo to share in detail, or two shorter ones. Even if you think we've "seen it all before", your nuances make all the difference! Old or new, big or small, puzzling or obvious, serious or outrageous. Please notify Bill Layton, 520 Mildas Drive, Malibu, CA 90265-3023 OR at "layton@physics.ucla.edu"

### **"WORKSHOPS"**

(see opposite page)

Notify Mary Mogge, (909) 869-4023 or "memogge@csupomona.edu" to sign up for a workshop.  
Enrollment will be limited to dues paying members.

### **THANK YOU EXHIBITORS!**

Many thanks to our exhibitors and door prize contributors including (as of press time) Addison-Wesley, PASCO, Prentice Hall, and Vernier Software .

### **DOOR PRIZES!!**

As always, door prizes will be given way to those in attendance at a drawing to be held in the afternoon.

### **ORDER-OF-MAGNITUDE QUESTION**

**What average power (in SI units, please!) could be generated by harnessing the tidal flow through the Golden Gate?**

The person whose estimate is the median of all entries received gets first pick of the prizes. The winner *must* be present at the awards ceremony.

# AMERICAN ASSOCIATION OF PHYSICS TEACHERS

## Meeting of the Southern California Section—1 November 1997

Royal High School — 1402 E. Royal Ave., Simi Valley --- Host: Keith Barker

- 8:15 Coffee and Donuts  
9:00-10:00 Registration  
8:30-10:00 Workshops (see page 4 for details)

- WS #1 -- "A Hands-On Workshop with the CBL and CBR"  
sponsored by Vernier Software, presented  
by Dick Vinetz  
WS #2-- "Computer Interfacing for all Sciences, inside  
and outside the lab" sponsored by PASCO,  
presented by Charles Witsch  
WS #3-- "Using Interactive Physics in the Classroom"  
presented by John Mallinckrodt

### MORNING SESSION

- 10:00 Introduction and Welcome  
10:15 "Peer Instruction in a Conceptual Physics Class"  
Hany Tawadrous (Cal Poly Pomona) and  
Harvey Leff (Cal Poly Pomona)  
10:30 "Small Scale Anisotropies: The Final Frontier"  
Jatila Hicks, Camarillo HS.  
10:45 Break and Late Registration  
11:00 "Project Oriented Physics, Every Fairy Tale  
Needs A Happy Ending"  
Fred Carrington, Grant HS.  
11:15 "Fundamentals of Roller Coaster Design, Disney  
Style." Invited paper by Don Hilsen from  
Imagineering.  
12:15 Lunch

### AFTERNOON SESSION

- 1:30 "Show and Tell"  
So far our contributors are: Paul Stanley, Fred  
Carrington, Bill Layton, and Keith Barker.  
If you have a brief contribution, bring it along and get  
your name added to the list!  
2:00 "Textbook Heresy".  
Craig Fletcher, Polytechnic School, Pasadena  
2:15 "The Future of High School Physics"  
Bill Layton, over the Hill and now at UCLA  
2:30 "The Benefits of a Good Fling"  
John Ball, Webb School  
2:45 "The Physics of Earthquakes".  
Gerry Simila, California State University at  
Northridge  
3:00 "C3P- Physics for All Teachers and Students."  
Richard Buck, Louisville High School  
3:15 "Yet Another Interactive Lecture Technique"  
Paul Stanley, California Lutheran University  
3:30 "The Physics of Putting the Shot".  
Art Altschiller, Van Nuys HS.  
3:45 Order of Magnitude Contest Results,  
Brief Business Meeting and Closing Remarks.  
4:00 Meeting Adjourns

## Meeting Notes



## **High School Teachers**

Opportunities for your physics students

### **INTERNATIONAL PHYSICS OLYMPIAD**

High school physics students from the USA compete with students from other countries in the Physics Olympiad. The deadline for applying for the 1998 US Physics Team is **Friday, January 16, 1998**. The initial screening exam will be held shortly thereafter. After competing in a second exam, twenty five students will attend a training camp in late May or early June. Five students will be selected from this group to compete in the international contest held July 2 - 10 in Iceland.

### **LOCAL SCHOLARSHIP PROGRAM**

The Southern California Section AAPT is hoping to again sponsor a local scholarship program for high school students utilizing the Physics Bowl test. If you are interested in helping with this project, please contact one of the local officers.

### **PHYSICS BOWL**

The 1998 AAPT/Metrologic Physics Bowl Contest will be held **Wednesday, April 22**. Entry forms must be received at the national office by **March 24, 1998**. Specialized math and science schools and last year's winners compete in separate regions. First and second year physics students compete in separate divisions, regardless of AP status. A school's score in a division is the sum of the four highest student scores. The 30 first place schools receive a laser donated by Metrologic. First and second-place teams receive T-shirts. All students and teachers who enter receive a certificate of participation. The contest exam consists of 40 multiple choice questions from all areas of physics. It is challenging, with an average score about 50%.

Ads for both these exams will appear in *The Physics Teacher* and *The Announcer* or write the AAPT, One Physics Ellipse, College Park, MD 20740-3845. A few early application forms will be available at the Fall Meeting.

### **PHYSICAL SCIENCES RESOURCES CENTER**

The new Physical Science Resource Center (PSRC) has copies of the 1994-1997 AAPT/Metrologic Physics Bowl Exams and the multiple choice component of the 1993-1997 Physics Olympiad Screening Exams available as Adobe PDF files. Visit the PSRC homepage at: "<http://www.aapt.org/psrc/>".

## 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 *The Physics Teacher*, the *American Journal of Physics*, or both. There are special low membership rates for students. Membership applications will be available at the Fall Meeting, or you can request one by sending a postcard to AAPT Membership Dept., One Physics Ellipse, College Park, MD 20740-3845.

### Extra Copies of American Journal of Physics?

Southwest College needs your donation of past issues of the AJP. They have 1950, 1952, and 1959 to present and need all other volumes. Bring them to the Fall Meeting and give them to the Treasurer. Your donation acknowledged in writing. *Thanks!*

Fernando J. Lopez-Lopez, Treasurer

### Extra textbooks?

Is your office bulging with books you don't want or need? Duplicate or older desk copies? Please bring unwanted books to the meeting. They will be made available to high school teachers.

### Pay your dues

The date on your mailing label indicates when your membership expires. Dues are \$10/year or \$25 for three years. 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 #, e-mail address, and status (faculty, staff, student, or other.) *Thanks!*

### Attend the National AAPT Meeting

The 1998 Winter Meeting will be held in New Orleans, Louisiana – Jan. 3-8. For details, see *The Announcer* or the Web Site: "<http://www.aapt.org/meetings/win98/98win.html>".

### Attend the APS/AAPT Spring Meeting

The 1998 Spring Meeting will be a joint meeting with APS held April 18-21, 1998 in Columbus, Ohio. For details, check out the Web site: "<http://www.aapt.org/meetings/Joint98/98joint.html>".

## Southern California Section AAPT Officers

<p><b>President</b> Fred Carrington U.S. Grant High School 13000 Oxnard Street Van Nuys, CA 91401 (818) 886-4654 fcarringt@aol.com</p>	<p><b>Vice President</b> Mary Mogge Physics Department California State Polytechnic University Pomona, CA 91768 (909) 869-4023 memogge@csupomona.edu</p>
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<p><b>Treasurer</b> Fernando J. Lopez-Lopez Southwestern College 900 Otay Lakes Rd. Chula Vista, CA 91910 (619) 421-9791 flopezlopez@swc.cc.ca.us</p>	<p><b>Immediate Past President</b> A. John Mallinckrodt Physics Department California State Polytechnic University Pomona, CA 91768 (909) 869-4054 ajmallinckro@csupomona.edu</p>
<p><b>Test Administrator</b></p> <p><i>Position Vacant</i></p>	