

AMERICAN ASSOCIATION
OF
PHYSICS TEACHERS

Spring 1997 Joint Meeting
of the
Northern California/Nevada Section
&
Southern California Section

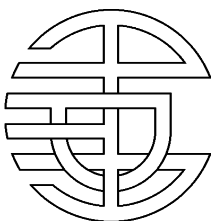
Friday April 25, 1997
Saturday April 26, 1997
Cal Poly San Luis Obispo

Local Host:
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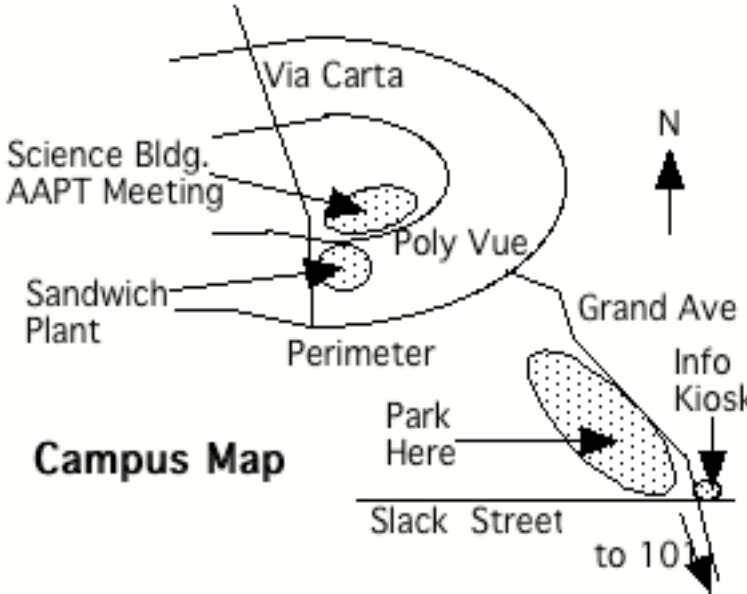
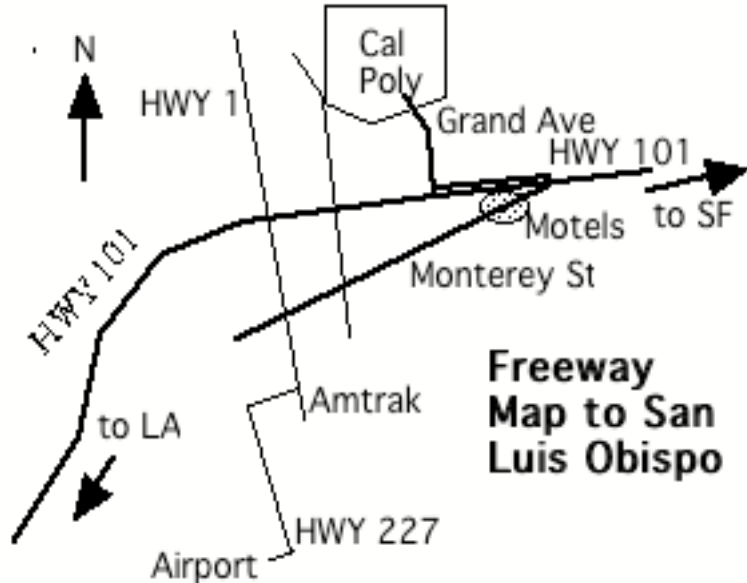
ADDRESSES CORRECTIONS REQUESTED

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Freeway and Area Maps



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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. The editor has application forms or you can request one by sending a postcard to AAPT Membership Dept., One Physics Ellipse, College Park, MD 20740-3845.

EXTRA AJP'S

ATTENTION present and future retirees and other interested parties: we need your donation of past issues of the American Journal of Physics to complete our collection at Southwest College. We have complete sets for 1950, 1952, and 1959 to present. We need all other volumes. Complete years would be desirable. You may bring them to the Spring Meeting, and give them to the Treasurer, or any of the Officers. Your donation will be much appreciated and acknowledged in writing if so desired. Thank you.--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, where 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 1997 Summer Meeting will be held at University of Denver, Denver, CO – Aug. 11-16. See *The Announcer* for details.

Directions to Cal Poly

From the south: Take the Grand Avenue exit and turn left.

From the north: Take the Monterey Street exit, go right to Loomis Street; left on Loomis and right on Grand Avenue.

Parking is free after 5 PM Friday and all day Saturday. Friday afternoon parking permits (\$1.50) may be purchased at the info kiosk on your right as you enter campus. Park in the huge parking lot to the left. Walk down Grand Avenue into campus. Signs will be posted to guide you to the Science Bldg.

Restaurant and tourist information will be provided at registration.

Motels

Apple Farm Trellis Court (800) 255-2040
2015 Monterey St. \$85-\$90
holding 16 rooms until 4/11

Holiday Inn Express (800) 465-4329
1800 Monterey St. \$77-\$87
holding rooms until 4/11

La Cuesta Motor Inn (800) 543-2777
2074 Monterey St. \$60-\$65
holding 10+ rooms until 4/4

Quality Suites(800) 228-5151
1631 Monterey St. \$99
holding 10 rooms until 4/11

Sands Motel (800) 441-4657
1930 Monterey St. \$64
holding 20 rooms until 4/11

Exit US 101 at Monterey St. Turn south. There is a 10% bed tax. Identify yourselves as AAPT or Physics Teachers going to Cal Poly

Please RSVP

To order enough food without overpaying, we need an accurate count of who will attend the Friday night reception and Saturday lunch (see pages 5 and 6 for details). To RSVP, visit the meeting web site at <http://prisma.foe.calpoly.edu> (preferred method) or

leave a message for Neil Fleishon at (805) 756-2458 or
nfleisho@calpoly.edu by Monday, April 21.

Invited Talks

“The Question of Ancient Life on Mars”

Dr. Richard B. Frankel

Dept. of Physics, Cal Poly San Luis Obispo

Evidence for ancient life on Mars has been reported by McKay et al.¹, based on the detailed study of a 2 kg meteorite, designated ALH84001, which was recovered in Antarctica in 1984, and subsequently identified as having a Martian origin. The scientific story is remarkable enough, but the full story also includes presidential politics, the NASA budget, and even the ghost of cold fusion. In my talk, I will present the evidence for ancient life on Mars, and discuss the question: if life began on Earth and Mars at about the same time, why is life so abundant on Earth today, whereas Mars appears so cold, dry and lifeless?

1 McKay, D.S. et al., Science 273, 924-930 (1996).

“Hale-Bopp: The Great Comet of 1997???”

Dr. Charles S. Morris

Jet Propulsion Laboratory, Pasadena

C/1995 O1 (Hale-Bopp) is the second potentially great comet to grace our skies in the last year. Intrinsically, it is the brightest comet to come into the inner solar system in 400 years. Only its relatively large distance from both the Sun and Earth prevents this interloper from being the "Comet of the Century." However, is it a "great comet" in the classical sense?...brilliant head and long bright tail. This talk will provide a background on comets and will discuss the apparitions of both Hale-Bopp and C/1996 B2 (Hyakutake), which put on a wonderful display in 1996.

Meeting Highlights

Thank you De Vry Institute for reimbursing Gunn High School and Clarence Bakken for the lost PowerBook.

“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. Each participant is limited to a maximum of 10 minutes.

THANK YOU EXHIBITORS!

Many thanks to Vernier and PASCO for sponsoring our Friday night reception. Many thanks to Addison-Wesley as well for donating a copy of the Feynman Lectures to our prize drawing.

DOOR PRIZES!!

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

ELECTION OF OFFICERS

Nominations (self or otherwise) are solicited for all offices of the Southern California Section. Please notify John Mallinckrodt by e-mail ajmallinckro@csupomona.edu or phone (909) 869-4054 by April 19. An election will be held at the meeting.

“HAIL-BOTT” ORDER-OF-MAGNITUDE QUESTION

How many “Bott’s Dots” are there in California? (Hint: “Bott’s Dots” are the raised bumps used to help indicate lane divisions on California highways.) 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.

NEW SOUTHERN CALIFORNIA MEMBERS

Get a free lunch and a one year membership when you attend the meeting. Contact John Mallinckrodt for details.

THANK YOU DE VRY INSTITUTE

Meeting Notes



AAPT Joint Meeting Friday, April 25 – Cal Poly San Luis Obispo

12:30 - 1:00, 3:00 - 3:30, & 6:30 - 7:00 PM

Registration

1:00 - 6:00 PM Workshops (Science Building)

1:00 - 3:00 “Computer Interfacing Inside and Outside the Laboratory Made Easy with the PASCO Science Workshop”

1:00 - 6:00 “Potpourri of Workshops: Static Electricity, Physics of Toys, Assorted Demos” PTRAs workshop presented by Andrea Erzberger, Art Fortgang, and Bruce Anderson

3:30 - 5:30 “CBL Workshop” presented by Clarence Bakken - a series of practical CBL labs that you can do with your physics class using the CBL

Workshops will be held in the Science Building. The info/registration table in the building’s front entrance will have room numbers. Spaces are still available in the workshops. Notify Fred Carrington (818) 886-4654 or fcarringt@aol.com to sign up.

7:00 PM Tribute to the Fourth Paul

Paul Hewitt, Paul Robinson, and Paul Tipler will present a tribute to the late Lester (Paul) Hirsch. The tribute will be held at the Sandwich Plant across the road from the Science Building.

8:00 PM Reception (sponsored by Vernier and PASCO)

A welcoming reception featuring cheese, fruit, sweets, wine, beer, and soft drinks will be held at the Sandwich Plant. If you plan to attend this reception please RSVP by April 21 (see page 3 for details).

8:00 PM Star Party

Members are encouraged to bring telescopes or binoculars for a Friday evening star/comet party. Hale-Bopp should be visible in

early evening. Gil Clark will set up remote viewing using the 24” Mt. Wilson telescope.

AMERICAN ASSOCIATION OF PHYSICS TEACHERS

Joint Meeting of the Northern California/Nevada Section & Southern California Section

Saturday, April 26, 1997

Science Building, Cal Poly San Luis Obispo — Host: Neil Fleishon

8:15 - 9:00 Registration, Exhibits, Coffee, and Donuts

9:00 Welcome

John Mallinckrodt, Pres., So Cal Section
Jim Hill, Pres., No Cal/Nev Section
Phil Bailey, Dean of the College of Science and
Mathematics, Cal Poly, San Luis Obispo

9:15 "Why High School Physics is Important"

Dave Wall, City College of San Francisco

9:30 "Physics in a Bottle."

Dick Kenealy, East LA College (Retired)

9:45 "Verifying the Conservation of Mechanical Energy using computer data acquisition."

Chris M. Ray, Saint Mary's College of California

10:00 "Modeling physics videos with Interactive Physics."

Mark Bunge, San Jose City College

10:15 "Expert Witness"

Lewis Carroll Epstein, San Francisco City College

10:30 Break

11:00 Invited Talk

"The Question of Ancient Life on Mars"

Dr. Richard B. Frankel, Cal Poly San Luis Obispo

12:00 Lunch

To enjoy the Central Coast Deli Buffet featuring a selection of cheeses, meats, veggies, salads, beverages, and dessert at \$9.00/person, RSVP by April 21 (see page 3 for details).

1:15 AAPT Section Business Meetings

1:30 "Show and Tell"

Greg Darakjian, Jim Hartke, Bill Layton, Myron Mann,
and Paul Stanley

2:00 Invited Talk

"Hale-Bopp: The Great Comet of 1997???"

Dr. Charles S. Morris, JPL, Pasadena

SESSION A

3:00 "From England with Love, PRIME SCIENCE, the US adaptation of England's Salters' Science curriculum for US grades 6-10"

Robin McGlohn, Menlo School, Atherton, CA

3:15 "Field testing a new Wall Chart describing the contemporary aspects of Nuclear Science"

Peggy McMahan, Contemporary Physics Ed. Project

3:30 "Getting the 'h' out of LED's"

Roger Morehouse, Cal Poly Pomona

3:45 "To Build a Better Yo-yo"

Dan Burns, Los Gatos High School

SESSION B

3:00 "The Effect of Nuclear Weapons on Red China"

A.Alba, J.Hartke, M.Chase, T.A.Hooks, H. Rietdyk, D. Snyder, X.K. Maruyama, U.S. Naval Postgraduate School, Monterey

3:15 "A brief overview of NASA's soon-to-be-launched Advanced Composition Explorer."

Michael Thayer, Space Radiation Laboratory, Caltech

3:30 "Two Inexpensive Undergraduate Research Projects in Beta Decay and Chaos Measurements."

Paul Stanley, Robert Borwick and Rebecca Busby
California Lutheran University

3:45 "An interdisciplinary, experimental course on non linear dynamical systems."

Nilgun Singar, Neil Fleishon, John Sharpe, Kent Morrison, Jean McDill, Rod Schoonover, Cal Poly San Luis Obispo

4:10 Order of Magnitude Contest Winner and Door Prizes

4:20 Adjourn