## PTSOS is brought to you by



The Northern California and Nevada Section of the American Association of Physics Teachers (NCNAAPT) has been a professional community for high school and college physics teachers since 1956. Its spring and fall meetings bring members together for learning and sharing about the latest developments in physics and physics instruction. The association maintains an active website at www.ncnaapt.org.

## And made possible by a grant from The Karl L. Brown Memorial Scholarship Fund

Dr. Karl L. Brown (1925-2002) was a research physicist at the Stanford Linear Accelerator Center and a pioneer in the development of the compact linear accelerator for cancer treatment, which aims highly precise radiation beams at tumors while minimizing exposure to healthy surrounding tissues.



## Physics Teacher SOS Web Address

www.ptsos.org Includes workshop registration information and other useful links.

## **Contact Information**

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#### SAN MATEO

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Where Northern California's new and newly assigned physics teachers are mentored by successful, experienced physics teachers...

for free!



# Forty percent of new teachers leave teaching within five years.

The call to recruit new teachers is heard across the nation. Efforts to retain new teachers are sporadic or non-existent. It's tough enough being a new teacher. Being a new physics teacher involves a special set of challenges.

- You have very little laboratory apparatus
- Some of what you do have is a complete mystery
- You're not sure what to make of content standards and statewide assessments
- Your physics enrollment is low
- Worst of all, there's no one you can ask for physics teaching guidance

# That's where Physics Teacher SOS comes in!

Physics Teacher SOS (PTSOS) offers workshops, mentors, and online support for new and newly assigned physics teachers in Northern California. There is no cost to individual teachers or their schools for these services. Any teacher newly assigned to teach physics within the last five years is encouraged to participate.

## **PTSOS Workshops**

Workshop leaders guide new teachers through a variety of activities and discussion topics, including

- effective demonstrations (and how to demonstrate them effectively)
- how to deal with paperwork
- minimizing lecture
- lab group management
- funding and how to be prepared for it
- how to increase physics enrollment
- content standards and statewide assessments
- managing apparatus
- integrating technology into curriculum
- effective presentation (PowerPoint) techniques
- topics brought up by the new teachers in attendance.

Attendees are given a variety of support materials at the workshop.



## **PTSOS Mentors**

New teachers are paired with experienced, local physics teacher mentors. The mentors are there to provide one-on-one guidance where needed and to answer questions that come up throughout the school year.

## **PTSOS Online Community**

Physics Teacher SOS maintains an online discussion group. Workshop leaders and mentors monitor the messages and add to the ongoing discussion of topics as they arise.

# **PTSOS Program Leaders**

#### **Paul Robinson** • *Workshop Leader* SAN MATEO HIGH SCHOOL

Paul has taught high school physics since 1974. He is a long-time member of and contributor to NCNAAPT and is currently Program Chair, Historian, and Section Representative. He is the author of the *Conceptual Physics* lab manuals. He is a recipient of the Presidential Award for Excellence in Math and Science Teaching.

#### **Dean Baird** • *Workshop Leader* RIO AMERICANO HIGH SCHOOL

Dean has taught high school physics since 1986. He has been a member, officer, and contributor with NCNAAPT. He is a co-author of the *Conceptual Physical Science* lab manuals. He is an appointed member of the California's Assessment Review Panel, and a recipient of AAPT's Distinguished Service Citation.

### **Stephanie Finander**

## Outreach Coordinator

WOODSIDE HIGH SCHOOL Stephanie has taught high school physics since 1990. She is a long-time member of and contributor to NCNAAPT and is currently serving as an elected officer in the section.

### Dan Burns · Workshop Leader

LOS GATOS HIGH SCHOOL Dan has been teaching high school physics since 1992. He has been a member, officer, and contributor with NCNAAPT. He works with the SETI Institute, USGS, AAPT, SJSU, and serves as the Faculty Scholar at the Lawrence Livermore National Laboratory.

### Steve Keith · Workshop Leader

CASA ROBLE HIGH SCHOOL (RETIRED) Steve taught high school physics from 1982 to 2006. He is a popular and prolific presenter of workshops for science teachers in the Sacramento area. He is a recipient of the Presidential Award for Excellence in Math and Science Teaching.