



High School Physics Teachers Day

FLYER

The American Physical Society (APS) Division of Atomic, Molecular, and Optical Physics (DAMOP) invites you to apply to attend a Teachers Day on Tuesday, May 29, 2010, in Houston. This free Teachers Day will provide a full day of professional development geared to physics and high school physical science teachers.

- There will be two sessions of hands-on workshops (see below), with innovative, classroom-ready activities for physics students—including take-home materials.
- Participants will see a video on the LIGO gravitational wave observatory (and receive the DVD), including Q&A with a LIGO physicist.
- At the event, you can network with fellow teachers.
- At lunch there will be a physicist at each table.



Where: Hyatt Regency Houston in the Center of Downtown

When: Saturday, May 29, 2010, 9:00 a.m. to 2:30 p.m.

Costs: *The program, meals, and parking will be covered by the APS.* The APS is, however, *unable* to cover substitute or other travel expenses.

How to register: To register for Teachers Day, please go to <http://www.aps.org/link/teachersdayhouston> and click on "Register at the nonmember rate" at the lower right (don't worry, it's free). Alternately, you can go to the APS homepage at <http://www.aps.org/>, and then navigate to Programs, to Education, and then click on "High School Teachers Days" in the Quick Links on the right. Finally, scroll down to "Teachers Days Produced by APS Units" and click on "Register" under the May 29, 2010 Houston, Texas Teachers Day. Once you get to the first registration screen, keep going until you see the text "You have successfully registered for the meeting. Your confirmation number is..."

Questions? Contact Ed Lee at LEE@aps.org

Please share this flyer with other physics teachers and with your science supervisor.

(Please see below for workshop information and agenda.)

A participant performs a diffraction experiment at an APS Teachers' Day.

Workshops

Diffraction, *Ed Lee, APS*—This workshop offers a qualitative exploration of diffraction, with numerous experiments and emphasis on fundamental wave properties. Experiments include observing diffraction with a lamp filament, including through color filters, shining a laser pointer beam at slits scratched in a blackened microscope slide, observing diffraction from DVDs and CDs, and also from metal mesh and a plastic grating.

Laser Light, *Heide Doss, APS Education Consultant*—Through hands-on activities, participants will explore the properties of laser light and then use these properties for interesting applications, including the speckle pattern on human skin and measuring the diameter of hair using diffraction. Also, participants will learn how lasers work using the PhET simulation of laser operation.

Agenda

9:00 - 9:25 Coffee & tea

9:25 - 9:30 Welcome

9:30 - 10:30 LIGO video, followed by Q&A with LIGO physicist Nergis Mavalvala

10:30 - 12:00 Diffraction workshop

12:00 - 1:00 Lunch

1:00 - 2:30 Laser Light workshop
