



# Physics and Physical Science Teachers' Day

The American Physical Society (APS) invites you to apply to attend a High School Physics Teachers' Day on Friday, April 11, 2008, to be held as part of the APS national meeting in St. Louis. This free Teachers' Day will provide a full day of professional development geared to physics and physical science teachers, including middle school.

- Hands-on workshops, with innovative, classroom-ready activities for physics students—many with take-home materials
- Research talks, one including a viewing and discussion of the video "Powers of 10."
- A breakfast, where you can network with fellow teachers
- Lunch with presenters and APS staff



A participant performs an optics experiment at a 2001 Teachers' Day.

**Where:** Adam's Mark Hotel, St. Louis, MO

**When:** Friday, April 11, 2008, 8:00 a.m. to 2:45 p.m.

**Costs:** *The program, meals, and parking will be covered by the APS.* The APS is, however, *unable* to cover substitute expenses. Also, you can attend regular sessions of the APS meeting on that day at no charge.

**How to register:** Go to

<http://www.aps.org/programs/education/teachers-day/index.cfm>, and click on "Register for April 11, 2008 Teachers' Day" (or, from the APS homepage, [www.aps.org](http://www.aps.org), go to Programs/Education/K-12/High School Physics Teachers' Days). Be sure to register early, because space is limited. You will receive a prompt email reply.

**Questions?** Contact Ed Lee at [LEE@aps.org](mailto:LEE@aps.org)

*Please spread the word to any other physics teachers who might like to attend, and also to your district's science supervisor.*

(over)

## Highlights from the Draft Agenda

### RESEARCH TALKS

*Scale in the Universe*, Susan Blessing, Florida State University

Participants will view the award-winning video "Powers of 10." After Q & A, Dr. Blessing will show clips from the film and offer commentary on the scale of the universe and related physics research.

*The second research talk is to be announced.*

### HANDS-ON WORKSHOPS

*Designing a Roller Coaster*, presenter is to be announced

During this AAPT/PTRA workshop, participants will investigate energy principles for a model roller coaster. By investigating the motion of the coaster with force meters and photogates, participants will determine the relationship between the potential energy change and speed. Each participant will receive black line master of student activity sheets used, and a raffle ticket for a chance to win a PASCO ME-8930 Smart Timer.

*Simple Machines and Conservation of Energy*, presenter is to be announced

During this AAPT/PTRA workshop, participants will construct pulley systems and inclined planes. Through measurements of forces and distances, participants will investigate the efficiency and conservation of energy. Each participant will receive black line master of student activity sheets used, and a raffle ticket for a chance to win a PASCO ME-8930 Smart Timer

*DC Motor*, Ed Lee, APS

Participants will disassemble a small dc motor, mount the rotor, power it with a battery, and make it spin by bringing up a magnet. The operation of this model motor produces many observations. Then, through further investigation, participants will construct and test a model to explain these observations.

Please note: Participants will receive the paperwork needed to get Continuing Education Credits from the American Association of Physics Teachers.

### Selected comments from the evaluation of the March, 2007 Teachers' Day

- A very informative day, excellent for networking, sharing experiences, methods.
- I enjoyed myself, met many new and interesting people, and took some useful ideas that will do to help in the classroom.
- Thanks for organizing this day for us. It is nice to step back from the daily grind and refocus on the big picture of teaching physics.
- Being able to talk with a college physicist over lunch was fantastic.
- Thank you for providing these workshops!
- Thank you for treating us so well. Parking/breakfast/lunch-awesome!
- Teachers Day is the best professional development around!
- I love attending this event. The presenters were excellent and activities were fun and useful.
- Great free event--the only kind our district would be excited about. Enjoyed the day and hope I will hear me about more days like this in the future!
- Thank you very much for doing these teachers days--very useful and thought-provoking.