

Tentative 2014/15 Schedule

Updated information will be posted to www.slapt.org and associated links throughout the year along with a link to update your email address.

August 23, 2014: Models, Curriculum and Standards
Host: Jim Cibulka/Bob Brazzle
Time: 8 am to 12
Place: Kirkwood High School
Details on other side . . .

September 27, 2014: Six Flags for Teachers
Hosts: Rex Rice and Six Flags
Time: 8:00 a.m. – 12:00
Place: Six Flags St. Louis
Details on other side . . .

October 4, 2014: Resources for an Enriched Physics Program
Hosts: Rex Rice and others
Time: 8:00 a.m. – 12:00
Place: Clayton High School
Details on other side . . .

November 8, 2014: Using LED's in your Physics Course
Host: Val Michael and Wayne Winters
Time: 8:00 am to 12:00
Place: John Burroughs School
Details on other side . . .

December 13, 2014: Magnetism
Make-and Take (Back by Popular Demand)
Host: Rex Rice, Jen Meyer, Val Michael
Time: 8:00 a.m. – 12:00
Place: Clayton High School
Details on other side . . .

January 24, 2015: Teacher's Choice Workshop
Host: Several
Time: 8:00 a.m. – 12:00
Place: Chaminade College Prep

February 7, 2015: Joint ACS/SLAPT
Time: 8:00 a.m. – 12:00
Place: Webster H.S.
Details: TBA

March 7, 2015: Using Free Videos in your Physics Classroom
Host: Jen Meyer
Time: 8:00 - 12:00
Place: Parkway Central H.S.

PHYSICS

Tempo

The Newsletter of the Saint Louis Area Physics Teachers
the St. Louis Section of the American Association of Physics Teachers



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Fall 2014

Join the St. Louis Area Physics Teachers!

You are invited to join the St. Louis Area Physics Teachers, a dynamic group of some of the finest teachers in the nation. We sponsor a variety of workshops, make-n'-takes, and sharing sessions that are hosted and led by teachers in the St. Louis area. SLAPT members support each other and benefit from one another's expertise in the challenging craft of physics teaching. Bob Brazzle shares his thoughts in his President's message below.



Join SLAPT by visiting www.slapt.org. Then, share your contact information under the "Mailing List" link to receive reminder emails. A few times each month, email updates are sent about upcoming events, messages from SLAPT members, and announcements about community activities of interest to physics teachers. We look forward to meeting you during the coming year as we work to serve our students through exemplary instruction.

SLAPT President's Welcome

Welcome to the 2014-15 school year! I hope you had a rejuvenating summer and are ready for the challenges and opportunities of the coming school year. During our planning meeting in May, we attempted to honor the feedback you all provided in our online survey. I believe we've put together a terrific portfolio of professional development offerings (summarized in the left column of this newsletter) and that these are highly relevant for novice and veteran alike; I hope you can attend most of these workshops.

The program-level changes I wrote about last year (brought on by the NGSS and the replacement of the AP Physics B course) are in full swing, and several survey responders expressed interest in program-level discussions. Therefore, Jim Cibulka and I will start the year off with a workshop devoted to the "big picture", such as helping you make curricular and instructional decisions based on Physics Education Research and consideration of the standards. Several of the other workshops during the year are devoted to enriching your course with things like contests, authentic inquiry projects, free online videos, and of course a field trip to Six Flags Physics day. We also will have a workshop specifically designed to address those content topics for which the survey responders expressed the most interest.

You may have heard of the idea of the "educational pendulum" swinging from one "hot approach" to another every few years. In my opinion, the solution is to never follow any pedagogic method exclusively. Teachers must develop a toolbox of diverse approaches to teaching, curriculum and assessment. Active participation in SLAPT generates this type of rich toolbox, because we are a community of professional learners and peer presenters. So I really hope to see big turnouts at all of our workshops this year. Enjoy!!

Bob Brazzle, bobbrazzle@yahoo.com, President, SLAPT

April 24, 2015: Six Flags Physics Day

Time: 9am to 5pm

<http://www.slapt.org/resources/sixflag/index.html>

April 25, 2015: Annual SLAPT Physics Contest at Wash U.

Start planning now to bring your students for this annual competition, now in its 30th year!

May 2015: SLAPT planning meeting for 2015-2016

Contact: SLAPT President Bob Brazzle

2014-2015 SLAPT Officers

President..... Bob Brazzle
Past-President..... Val Michael
AAPT Section Rep.....Bob Brazzle
Treasurer.....Gene Bender
Website.....Mike Johns



Opening Workshops Fall 2014

Models, Curriculum and Standards

When: August 23, 2014, 8:00 a.m. to 12:00

Where: Kirkwood HS

The terms "models", "curriculum" and "standards" are misunderstood and ambiguous. Our goal for this workshop is to develop a shared understanding of what they are and what they are not. Participants will engage with several different types of models, experience several examples of the modeling approach to teaching physics, see how the modeling philosophy leads to a powerful narrative (i.e. curriculum), and evaluate the compatibility of this narrative with the Next Generation Science Standards.

Resources for an Enriched Physics Program

When: October 4, 2014, 8:00 a.m. – 12:00

Where: Kirkwood High School

Rex Rice and others will share information about Physics- and Engineering-oriented competitions for your students (such as the annual SLAPT contest held at Washington University), authentic distributed scientific inquiry projects in which your students can participate (such as the Stanford protein folding project), robotics competitions, etc.

Six Flags Events Continue for September 2014 and April 2015!



Mark your calendars now for our 2014 Teacher Workshop at Six Flags on Saturday, September 27, and for Physics Day 2015, scheduled for April 24.

Six Flags has supported SLAPT's development of a comprehensive educational component for Physics Day and has made Physics Day separate from Math and Science Day, giving students more time on the rides and reducing lines. To learn more about how to include amusement park physics into your classroom, join us (and bring a guest) for a free workshop at Six Flags on September 27 at 8am. We'll begin with a behind-the-scenes tour of the engineering that makes the rides work. Next, we'll provide an overview of the resources available to use with students in preparation for Physics Day and to use at Physics Day. Finally, we'll strap on our wireless data collection devices and ride, ride, ride!

RSVP to Michelle Westerman, mwesterman@sftp.com with "Physics Workshop" in the subject line and you and your guest's name in the body of the note. Additional Six Flags Physics day curriculum materials and information can be obtained at: <http://www.slapt.org/resources/sixflags/index.html>

November 8, 2014: Using LEDs in your Physics Course

When: November 8, 2014, 8:00 a.m. to 12:00

Where: John Burroughs School Hosts: Val Michael and Wayne Winters

Eugenia Etkina published two papers in The Physics Teacher about using LEDs in nearly every unit within a general physics course. Val and Wayne will facilitate several activities using LEDs and will utilize the guided inquiry approach (called the "ISLE" approach) developed by Etkina and her colleagues.

December 13, 2014: Magnetism Make-and Take

When: December 13, 2014, 8:00 a.m. – 12:00

Where: Clayton High School Hosts: Rex Rice, Val Michael Jen Meyer and others.

Participants will help construct a platform which can be used for several different activities and experiments involving magnetism. Experience the activities yourself, and then help our team build the set(s) you will take with you. The sets will be available for a modest cost, which we will advertise closer to the date of the workshop (after we have purchased the materials).



St. Louis Area Physics Teachers

The St. Louis Section of the American Association of Physics Teachers

c/o Gene Bender, DeSmet Jesuit High School

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