

## Alabama Section

Section Members presented at two sessions for the annual conference of the Alabama Association of Science Teachers on November 5-6, 2018 in Tuscaloosa, Alabama at the University of Alabama. The first session was a Make and Take of PTRA demos and labs. Each participant joined the Alabama AAPT Section when they attended. This presentation is always a highlight of the ASTA Conference and spreads the Section interest for AAPT and Physics Education. A second hands-on session was for K-8 teachers. This PTRA presentation linked science demos/string and sticky tape items with K-8 Literature. The hope is to have more science taught in elementary schools.

The Annual Meeting of the Alabama Section of AAPT was held at Birmingham Southern College on January 26, 2019 from 8:30-4. After registration and coffee, the orientation for the meeting was shared by Mark Rupright, the 2018-19 president. There were concurrent sessions in BSC classrooms in the Elton B. Stephens Science Building. Sessions were offered from and for K-8 teachers, HS, Two Year College, College and University members.

Some of the options were:

- Application Based Learning in Physics
- Round Table: APEX Teaching Strategies that Work
- Net Force Made Easy
- Measuring Velocity and Acceleration with Audacity
- Physics Pet Peeves-Why Study Physics
- Fine Tuning the Universe for Life
- Scripted Tutorials to Guide Troubleshooting Skills
- PTRA: Literature Connections for with Physics for k-8 Students
- Electronic Data Notebooks
- Challenge Based Labs: Beyond the Lab Report

Lunch was delivered in and the group was offered a tour of the Physics Department of Birmingham Southern. One of the highlights was the library BSC is cataloging of books and resources from Physics

Professors that have retired and were strong members of the Section and AAPT.

After the conclusion of the sessions and workshops a business meeting was call to order. The Vice President from 2018-2019, Bill Ossenfort, from Troy University will become the 2019-2020 President. Cynthia Thomas from Hewitt-Trussville High School will be the new Vice President. The Annual meeting in 2019-2020 will be held in the Andalusia, Alabama area of the state. This reinforces our goal to move the meeting to different areas of the state. Section Representative Tommi Holsenbeck will continue in her dual role of Secretary/ Treasurer and Section Representative. She was elected to the AAPT Board in January as the Vice Chair of the Section Representatives and will be on the Board for 4 years.

*—Tommi Holsenbeck , Section Representative*

## Idaho Utah Section



The annual meeting of the Idaho-Utah Section of the American Association of Physics Teachers was held Friday/Saturday March 1-2 at the Utah State University campus in Logan, Utah. The local organizer and current president was James Coburn, and the meeting was wonderful, and well-attended by college and high school teachers and students. A local sandwich shop catered dinner Friday evening, followed by the ever popular demo show, where several attendees showed off their favorite physics

demos for a packed house in the science building lecture hall.



Saturday morning a light breakfast led to a morning session of talks and presentations, followed by a mid-morning snack and student poster session. A second session of contributed talks got us through to the luncheon and business meeting, where a spate of elections and announcements were on the agenda. The announcements included a reminder of all the programs and benefits available through AAPT and a reminder that the National Meeting will be held in our section in Provo this year, for the first time since 2005. Initial plans were made about garnering section help for the various responsibilities associated with hosting a national meeting. We also made plans for updating the mailing list and encouraging more younger faculty to be involved with the section. The business meeting elections resulted in Phil Matheson from Utah Valley University volunteering Dustin Shipp to be elected as president-elect and host the meeting in 2020. That means the current list of section officers stands as follows:

- Past President: Matt Zachreson - BYU
- President: James Coburn - USU
- Vice-President Elect: Daryl Macomb - BSU
- President Elect: Dustin Shipp - UVU
- Section Rep: Brian Pyper - BYU



The section meeting next year will be hosted at BSU with Daryl Macomb as the local organizer, and two years from now it'll be held in Orem at UVU with Dustin Shipp as the local organizer.

After lunch there were a few more talks and a handful of short workshops, and the day finished with a tone tube make-and-take organized by Chase Goddard from Box Elder High. A concurrent meeting of the SPS Zone was also popular and fairly well attended. James Coburn did a fine job with the meeting and everyone who came had a great time.

—*Brian A Pyper PhD, Section Representative*

## Montana Section

The Montana Section of the American Association of Physics Teachers held its annual meeting on Thursday, October 18th, 2018 during the Montana Federation of Professional Educators fall conference at Billings Skyview High School. Twenty one physics educators were in attendance.

After a welcome by President David Hembroff, section representative Rich McFate presented information on AAPT membership and benefits. Special acknowledgement was given to Montana's own Jan Mader, for being a candidate for AAPT Vice President. (Jan was successful in being elected.) Prizes were given out to less experienced physics teachers who participated in helping with a few demonstration and their explanations. An active Physics Share-a-thon took up most of the remainder of the meeting. Two needing of mentioning were Maureen Ladd from Billings West High School sharing how she uses guitar building to increase enrollment and enthusiasm in her physics 2 class. In addition, Glen Govertson made a small presentation of the content of his "Mr. G's Physics Show". Glen is a past officer of our section and is still involved in putting on physics demonstrations throughout Montana, Florida, and oversees. His yearly sectionals at the teacher conference is always overflowing and well received. It was decided that the current section officers would maintain their present positions for the next two years. Meeting was adjourned.

—*Richard McFate, Section Representative*

## Northern California/Nevada Section

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On April 5/6, 2019 University of the Pacific hosted the Spring Meeting of the Northern California/Nevada section of the AAPT. Roughly 75 members were in attendance for Saturday's events, approximately 1/4 were women.

Friday night saw vendor workshops from PASCO, Vernier and PocketLabs, followed by dinner at a local brewpub and later a star-gazing on the UoP campus.

Saturday with the always popular Share & Tell. The morning's invited speaker was Natasha Holmes, who was flown in from Cornell University for this meeting. Her talk was titled "Why Traditional Labs Fail (And What to Do About It)."

A short business meeting allowed for the re-election of our current officers, and a call for volunteers. The use of the Physics GRE for graduate admissions was discussed, and the membership directed the officers to advocate for the removal of the GRE from the selection process. Lunch consisted of sandwiches and topic tables. As many physics educators are isolated, our section schedules 90-minute lunches with intention.

The afternoon consisted of an invited talk by UoP's Binod Nainabasti on "The Role of Students' Participation on Learning Physics in Active Learning Classes." This was followed by two hours of member-contributed workshops, and for the first time ever, an EdCamp. We will be playing with the EdCamp model next year so members can bring specific topics to the group for solution and discussion with like-minded colleagues.

The section was able to award three dependent-care grants courtesy of an AAPT mini-grant, and also

had a lactation room available.

Our Fall Meeting will be in early November, site and date TBD.

—David Marasco, Section Representative

## Southern Ohio Section

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The "spring" meeting of the Southern Ohio Section was held on Saturday, February 23 at South-western Career Center in Grove City. Many thanks to Marie Wenzke for serving as our host. For the second consecutive year, it was a joint meeting with the Ohio Modeling teachers' Modelpalooza event, so there were options throughout the day to brush up a bit on chemistry and even a bit of biology teaching, in addition to physics and physical science. Between 55 and 60 people were in attendance.

The day was set up as a conference with 3 sets of parallel sessions plus a keynote and a business meeting. The keynote, "A Stroll Down Modeling Lane: Fifteen Years of Lessons Learned," was presented by Mary Whalen (Olentangy High School) and Doug Forrest (Pickerington High School – North).

The parallel sessions were "Messelson Stahl in Modeling" by Jessie Dorman (New Albany High School), "The Role of Technology in Student Metacognition for Improving Learning in STEM Courses" by Matt Stoltzfus (Chemistry, Ohio State), "Introduction to Modeling" by Brian Carpenter (Laurel School) and Michael Lerner (Beachwood High School), "Whiteboarding Doesn't Have to be Whiteboring" by Chas Deremer (Marion L. Steele High School), "The Best Way to Conclude General Chemistry: An Integrated Lesson Explaining Climate Change" by Ted Clark (Chemistry, Ohio State), "Linked and Unlinked Genes" by Mary Palmer (Sycamore High School), "Chemistry (and Other Science!) for All" by Cathy Mehl (Tolles Career Academy), "Gender in the Classroom" by Adrienne Traxler (Wright State University) and Jennifer Blue (Miami University) a forum on attracting and retaining students in the physical sciences co-facilitated by Jeff Rodriguez (Anderson High School) and Adrienne Traxler, and a panel discussion with former high school students coordinated by Doug Forrest.

At the business meeting portion of the program, the following officers were elected:

- President-elect: Krista Wood (University of Cincinnati – Blue Ash)
- Vice-President for 4-year colleges: Alex Maries (University of Cincinnati)
- Treasurer: Adrienne Traxler (Wright State University)
- Secretary: Lora Sheppard (University of Cincinnati)

### State Science Day

On the morning of Saturday May 11, two dozen physics educators from Ohio served as judges at Ohio's State Science Day competition to determine the awarding of physics prizes for students in high school, middle school, and late elementary school. Kathy Harper stepped into the role of judging coordinator for the year, as we are still looking for someone to take the role on for a longer period of time. The judging is managed by the Southern Ohio Section of AAPT, with the generous financial support of the Ohio Section of APS. The following students were recognized:

#### Elementary

1st place: Drew Bowles (Unioto ESCOPES Academy, Chillicothe) "Sound Energy"

2nd place: Ethan Bowman (West Elementary School, Athens) "How different papers affect the length of flight in paper airplanes"

3rd place: Hannah Rose Sheets (St Rose School, Corning) "Hannah Sheets"

3rd place: Emily Carr (John Sells MS, Dublin) "Don't Pop Your Top"

#### Middle School

1st place: Sarah Burns (Sacred Heart of Jesus School, Wadsworth) "Musical Instrument Soundboards and Alternative Materials"

2nd place: Evan Scott (Mother Teresa Catholic school, Liberty Twp) "Expensive Baseball Bat vs Inexpensive Baseball Bat"

3rd place: Jay Kalpeshkumar Panchal (Dayton Regional STEM School, Xenia) "Does Temperature Affect Surface Tension?"

#### High School

1st place: Zoe A Williams (Athen HS, Athens) "Goldilocks' Bassoon – When is Conical Bore Just Right?"

2nd place: Leena Vyas (Tippecanoe HS, Tipp City) "Thermodynamics: Analysis of Wildfire Ash, and the Melting effect of Alaska's Mount Hunter"

3rd place: Allie Carter (Bloom Carroll HS, Canal Winchester) "Can the Mbira, an African Musical Instrument, Distinguish Medication Type?"

#### Upcoming Meetings

The upcoming fall meeting will be at Princeton High School near Cincinnati on Saturday, October 19. Jeremy Zimmerman will host. The spring meeting will be in the Columbus area.

—Kathy Harper, Section Representative

### Southeastern Pennsylvania Section

The 2018 Spring SEPS meeting was held on the weekend of March 9-10, 2018 at Pennsylvania State University – Abington. Keynote speakers included our host, Ann Schmiedekamp of PSU-Abington, on "NASA's Voyager Mission: Our Cosmic Message in a Bottle," Mukul Tulaty of PSU-Abington, on "Walking with Newton – Exploring Newtonian Mechanics in Gait Analysis, and Maura McLaughlin of West Virginia University, on "Waves of the Future: Using the Green Bank Telescope to Transform Science Education in the U.S." Barry Feierman, Westtown School, and Carl Schmiedekamp, PSU-Abington, set up a workshop comparing PASCO and Vernier labs, and the meeting concluded with a roundtable discussion on student engagement and curriculum planning, among other subjects.

At this meeting, the following officers were elected for the 2018-2019 year: B.J. Enzweiler, Science Leadership Academy, President; Jay Bagley, Temple University, Vice President; Ryan Batkie, The Shipley School, Secretary; and Art Zadrozny, West Chester East High School, Treasurer.

The Fall 2018 Demo Show was held on Saturday, October 27, at Temple University, and was hosted by SEPS Vice President Jay Bagley. Over a dozen demonstrations were presented in the morning to a

diverse group including a number of new high school teachers in the Philadelphia region.

Finally, the Spring 2019 meeting was held March 29-30 at Villanova University, hosted by SEPS Section Representative Jeremy Carlo. Keynote speakers included Bill Berner of the University of Pennsylvania, on “Educational Boundary Conditions: A Report from the High School – College Discontinuity Zone,” Eugenia Etkina of Rutgers University, on “Investigative Science Learning Environment (ISLE): Learning Physics by Practicing It,” and Angelo Armenti of Villanova University, on “The Physics of Sports and Excel Spreadsheets.” Afternoon sessions included contributed talks and posters, and a workshop by Barry Feierman entitled “Eight Challenging Labs for High School / College.”

At this meeting, the following officers were elected for the 2019-2020 year:

- Jay Bagley, Temple University, President;
- Laura Williams, Bodine High School, Vice President;
- Ryan Batkie, The Shipley School, Secretary;
- Art Zadrozny, West Chester East High School, Treasurer;
- Amber Stuver, Villanova University, Section Representative (2019-2022).

*—Jeremy P. Carlo, Section Representative*

To list your section meeting in the AAPT Calendar of Events, e-mail the information to [mhall@aapt.org](mailto:mhall@aapt.org)

**American Association of Physics Teachers**

One Physics Ellipse • College Park, MD 20740

ph. 301.209.3333 • fax 301.209.0845 • web [aapt.org](http://aapt.org)