

AAPT-PTRA September Article for the eNOUNCER submitted by Trina Cannon cannonb75@gmail. Com

The summer of 2017 was an exciting time for the current Physics Teacher Resource Agents at the Covington, KY – Cincinnati, OH meeting. The three-day gathering began with an opening session on Quantum Computing presented by an extraordinary speaker, Martin LaForest, from IQC, Waterloo, Canada. The final day was completed with an informative presentation by Damian Pope from Perimeter Institute, Waterloo, Canada.



Interspersed were sessions on engineering orchestrated by Dwain Merrell and Lars Johnson. The PTRAs accepted the challenge to construct a house from minimal instructions and materials to test heat loss with and without insulation. A second challenge was to make a density bottle with minimal instructions. The objective was to work with the two solutions such that the beads would come to rest in the middle of the bottle between the two solutions.

The current group of PTRAs welcomed two new recruits into the ranks. They are David Miller from Willmar MN and Todd Hansen from Lena WI.

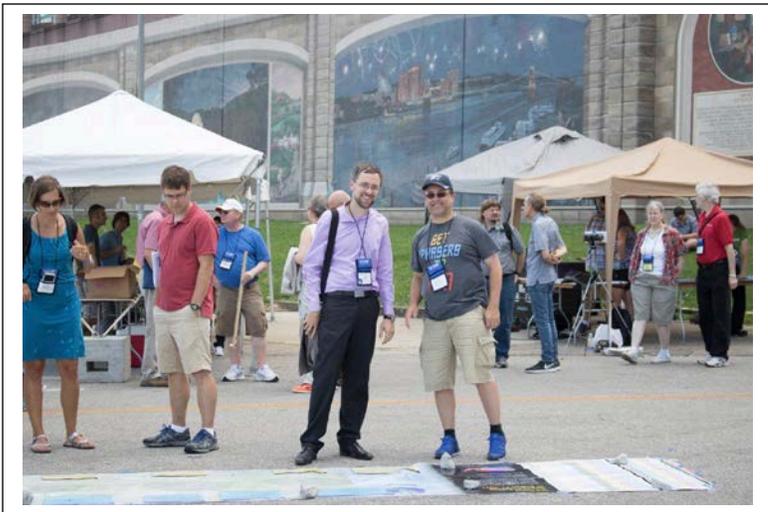


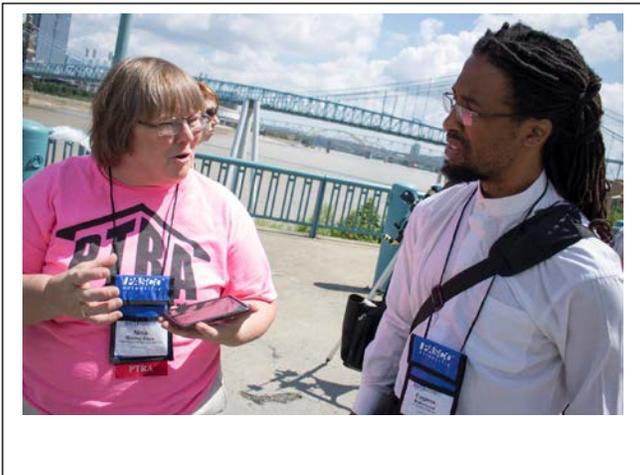
This summer an excited group of PTRAs reported for increasing and improving physics outreach programs through physics education. Edward Sunderhaus, Physics Instructor and Dept. Chair for Humanities and Science Division, was a gracious host for the PTRAs at Cincinnati State College.



After a packed 3-day session, the group attended the AAPT meeting with more enthusiasm. The summer meeting organizers asked the PTRAs to prepare, manage and present a session at noon on Monday of the AAPT meeting. The theme of the session: The Great Solar Eclipse. True to form, they took the 2 tents and 4 tables and conducted a masterful session. The houses constructed in the earlier workshop made an appearance. Instructional plans and construction guidelines were given to visitors. Duane Merrill and Lars Johnson constructed and demonstrated solar ovens. Guides for safe and proper sightings of the eclipse, obtaining eclipse glasses and complementary lessons were given at different locations at this session. Telescopes were set up for viewing the sun with proper and safe filters. Visitors to this session left with an abundance of information to lead their students through a truly momentous astronomical event.







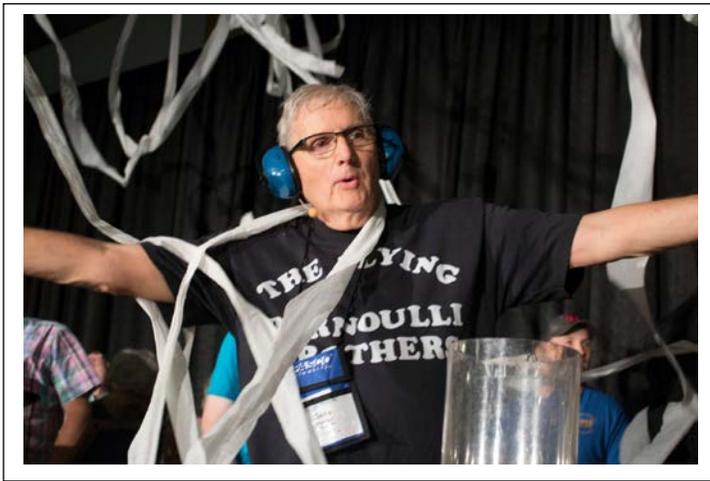
Another milestone for the PTRA group was completed when two very active and involved members were recognized with the Homer L. Dodge Service Award. Duane Merrill and Bill Reitz (on the left) have been valuable and consistent PTRA's. They have been non-stop participants since their initial summer PTRA workshop. Here they are with two other recipients and Janelle Bailey.



As the AAPT meeting was ending, the Bernoulli Brothers, Gene Easter and Bill Reitz, entertained the meeting attendees with a wild and energetic evening of activities and audience participation. Again, the PTRA's came to the assistance of the featured leaders. With laughter and jokes, teasing and cajoling, dancing and wiggles, the Bernoulli Brothers demonstrated and illustrated science can be fun and informative.







The PTRA's are involved in many aspects of physics education, both personally and professionally. Many events are planned for the fall. Details and photos will appear in future eNnouncers. Many are willing to offer workshops at section meetings and they are scheduled on the sections' websites. Do not hesitate to contact PTRA's if you do not have any scheduled to date.

Current workshops planned:

From Steve Henning:

- 1) Sept 25 "Physics with Video Analysis". Location NYC, NY at Math for America.
- 2) Sept 29 "Fun and Engaging Labs". Taken from Duane, Lars, and Wendy. Location Syracuse, NY. Joint NY, NJ, & NE Section Meeting.
- 3) Oct 16 and Oct 30. "Perimeter Institute Materials". Location NYC, NY at Math for America.

From the Texas Section:

TSAAPT at University of Texas at Dallas has 15 workshops planned that will be presented by PTRAs. They are listed on the website.

CAST will have many workshops scheduled for High School, Middle School and Elementary Techers. This state meeting will be in Houston TX, Nov 8-10, 2017.

Whatever the fall has in store for Physics Education, one thing is a given. The PTRA's will be re-energizing for more interaction with physics teachers all over the country. And they will return to the next AAPT meeting invigorating everyone they meet. Look for us. PTRA's are ready to learn and share!

