



# Minutes of the 2022 meeting of the TAAAPT

**A Hybrid Meeting at Austin Peay State University**

**Friday and Saturday, April 8-9, 2022**

The 2022 Tennessee section of Association of American Physics Teacher's annual meeting was held as a hybrid meeting at Austin Peay State University, Clarksville, TN on April 8-9, 2022. Most people attended in person, but there were few opted to join the meeting via zoom.

The meeting started on Friday evening, April 8<sup>th</sup> with registration at 5:30 pm, dinner at 6:00 pm, a planetarium show hosted by Dr. Spencer Buckner at 7:00 pm, and a presentation by the keynote speaker Dr. Stephen Taylor at 7:30 pm. The title of the talk is "The Warped Side of the Cosmos with Gravitational Waves".

The meeting resumed on Saturday morning, April 9<sup>th</sup>. It started with breakfast and registration at 8:30 am, contributed talks 9:00 am – 12:00 pm, lunch and poster presentations 12:00 pm – 1:00 pm, business meeting 1:00 pm – 1:30 pm, and 1:30 pm – 4:00 pm for a hands-on workshop hosted by Dr. Eugenii Donev on Sensing with Surface Plasmons for Advanced Lab Activity.

There were about 40 people attended the meeting (see the table at the end). Unfortunately, some students from University of the South did not sign up and they were underrepresented in our record.

Few awards were given in the meeting:

**The best oral presentation for students** was awarded to April Torres of Austin Peay State University. The title of her talk is gri Photometric analysis of Open Cluster NGC 6253.

**The best poster presentation for students** were awarded to two separated groups (a tie):

Group one from University of the South: *Rutherford Backscattering to Determine Solubility of Bi in Ga* Nicholas Gunter, Isabel Collins, Alaa Abdelhamid, Henry Atwater, Vincent DiNella, Mate Garai, Hugh Graham, Ashraful Haque, Michael Coffey, and Randolph Peterson.

Group two from Austin Peay State University: *Measurements and Simulations of Temperature-Dependent Optical Transmission Through Nanoholes in a Bilayer of Gold and Vanadium Dioxide* Zachary Givens and Eugenii U. Donev.

**The second best poster presentation for students** was awarded to a group from University of the South: *Energy Loss of Alpha Particles in Thin Layers of Copper* Isabel Collins, Nicholas Gunter, Alaa Abdelhamid, Henry Atwater, Vincent DiNella, Mate Garai, Hugh Graham, Ashraful Haque, Michael Coffey, and Randolph Peterson.

**The third best poster presentation for students** was awarded to Li Loy of Austin Peay State University with the title of The Variable Star BK And.

**The best local high school physics teacher** was awarded to Mr. Ridelto Gutierrez of Northwest High School in Clarksville, TN.

### **Other business discussed:**

A. Officers: Dr. Christine Cheney from University of Knoxville is the chair-elect for 2022-2023. Drs. Spencer Buckner and Pei Xiong-Skiba, both from Austin Peay State University, were re-elected as the section representative and secretary/treasurer (2022-2023), respectively. The chair-elect for 2023-2024 is Dr. Nat Smith from Middle Tennessee State University.

B. The 2023 TAAPT will be held at University of Knoxville. Tentatively, it is on March 24<sup>th</sup>-25<sup>th</sup>, 2023.

C. Official website for the organization: The official website for the organization has been established at <https://taapt.org/>. We truly appreciate the help of Dr. Eugenii Donev's wife. The site functions well and looks professional! It won many praises from the meeting attendees.

D. Membership fee: Historically, the dues collected from membership (about \$200/year) were spent on awarding students and the best local high school physics teacher. Considering the rising cost for the organization in the future, including hosting and maintaining the organization's website and also increasing the sizes of awards, it was unanimously agreed that we will raise the future annual membership fee from \$10 to \$15, starting 2023.

Finally, we would like to thank Dr. Eugenii Donev and Austin Peay State University to host this annual meeting.

Pei Xiong-Skiba  
Secretary/Treasurer, TAAPT  
April 14<sup>th</sup>, 2022

Table 1 (a) - List of Faculty Attendees

Last Name:	First Name:	Affiliation:	Participation
Buckner	Spencer	Austin Peay State University	in-person
Cheney	Christine	University Of Tennessee	in-person
Clarke	Ted	Christian Brothers University	in-person
Cooper	Kevin	Lincoln Memorial University	via-zoom
Donev	Eugenii	Austin Peay State University	in-person
Erkal	Cahit	The University of Tennessee at Martin	in-person
Farvin	Allen	Pellissippi State Community College	via-zoom
Gaither	Bryan	Austin Peay State University	in-person
Getaneh	Misganaw	University of Tennessee at Martin	in-person
Gutierrez	Ridelto	Northwest High School in Clarksville TN	in-person
Kelly	John	Tennessee State University	in-person
King	Alex	Austin Peay State University	in-person
Kochat	Suja	Christian Brothers University	via-zoom
Long	Stacy	Lincoln Memorial University	via-zoom
Longhurst	Russ	Austin Peay State University	in-person
Parks	James	U. Of Tennessee, Knoxville	in-person
Peterson	Randolph	University of the South	in-person
Robertson	William	Middle Tennessee State University	in-person
Smith	J. Allyn	Austin Peay State University	in-person
Taylor	Stephen	Vanderbilt University	in-person
Varriano	John	Christian Brothers University	in-person
Vaughn	Emmabeth	Austin Peay State University	in-person
Wolff	Nicholas	Lane College	via-zoom
Xiong-Skiba	Pei	Austin Peay State University	in-person

Table 1 (b) - List of Student Attendees

Last Name:	First Name:	Affiliation:
Artwater	Henry	University of the South
Abdelhamid	Alaa	University of the South
Carlson	Tristan	Washington University in St. Louis
Givens	Zachary	Austin Pray State University
Grimes	Sandra	Christian Brothers University
Hannah	Jacob	Austin Peay State University Physics
Kope	Eden	Austin Peay State University
Kope	Eden	Austin Peay State University
Krebs	Emma	Northwest High school
Lanier	Meleah	Austin Peay State University
Loy	Li	Austin Pray State University
Porter	Meagan	Austin Peay State University
Torres	April	Austin Peay State University