



**Minutes of the 2019 meeting of the TAAPT
University of Tennessee at Martin**

**Annual Meeting of the Tennessee section of the American
Association of Physics Teachers
Friday, March 29 through Saturday, March 30 2019
University of Tennessee
Joint Institute for Advanced Materials**

The 2019 Tennessee section of Association of American Physics Teachers' annual meeting was held in the Institute for Advanced Materials of University of Tennessee at Knoxville (UTK) in Knoxville, TN Friday, March 29 through Saturday, March 30, 2019. The meeting started with a banquet on Friday night at 6:00 p.m. This was followed by a presentation given by the keynote speaker Dr. Thomas Proffen from Oak Ridge National Laboratory Neutron Science Directorate. Dr. Proffen is the Director of the High Performance Computing, Modeling and Data Analytics Science Initiative. The title of his talk was "*Oak Ridge Computer Science Girls*". Afterwards, everyone was invited to attend a Planetarium Show in Nielsen Physics Building.

The Saturday program started at 7:00 a.m. with registration and a continental breakfast. Formal presentations started at 8:15 a.m. and finished at 3:10 p.m. with a lunch break, student poster session, and tour of the Advanced Materials Labs in between. Detailed meeting presenters and attendees are listed in tables near the end of this document.

The section business meeting was held at the end of the morning presentations, addressing the following agendas:

- 1) It approved the 2018 Meeting Minutes and Financial Report prepared by Dr. Pei Xiong-Skiba, the secretary/treasurer.
- 2) Dr. Spencer Buckner, our section representative, reported updates on AAPT, including meeting announcements for summer 2019 and winter 2020 meetings.
- 3) It elected new officers: Drs. Spencer Buckner and Pei Xiong-Skiba, both from Austin Peay State University, were re-elected as the section representative and secretary/treasurer (2019-2020). Dr. Cahit Erkal of University of Tennessee at Martin will be the chair-elect for 2020-2021. Dr. Nat Smith from Middle Tennessee State University is the chair-elect for 2019-2020. The 2020 annual meeting will be held at Middle Tennessee State University in Murfreesboro, TN.
- 4) It made rewards to three student posters. The best student poster went to Sara Bey of the University of Tennessee at Chattanooga with a \$50 monetary reward. The second best poster was a tie between Jared Averitt of Austin Peay State University and Tristan Carlson of Sewanee the University of the South with \$25 reward to each student.

We would like to thank Drs. Christine Cheney and James Parks of the University of Tennessee at Knoxville for hosting this successful meeting. Dr. Cheney made a new extensive mailing list including physics faculty in the entire state, consequently more new faculty attended the 2019 meeting. We truly appreciate her efforts.

Pei Xiong-Skiba
 Secretary/Treasurer, TAAPT
 April 3rd, 2019

Table 1 - List of presenters and the titles of their talks:

Presenters (Oral)	Titles
Thomas Proffen Oak Ridge National Laboratory Neutron Science Directorate Invited Speaker	Oak Ridge Computer Science Girls
John Varriano Christian Brothers University	Acoustic Fun: Simple Speaker and Levitator
Richard Ignace East Tennessee State University	Impulsive Magnetic Damping (Richard Ignace and Gary Henson)
Travis Jenkins University of Tennessee at Martin	Autonomous Driving of a Power-Wheels Toy Car
Cahit Erkal University of Tennessee at Martin	Updating traditional physics experiments: measuring the magnetic field of a bar magnet
Randy Peterson Sewanee The University of the South	Alpha and Immersions
James Sternberg Hardin Valley Academy	Dialogue Between High School and University Teachers: Expectations, Requirements, and Ideas
Robert Grzywacz University of Tennessee at Knoxville Invited Speaker	New Element Tennessee and its Neighbors – The Glam and Backstage of the Superheavy Elements Research
Ron Henderson Middle Tennessee State University	Algebra-based Physics: Results of a 2-year Redesign
Erica Johnson Halls High School/UTK	Quarknet and Physics Teachers

Table 2 - List of poster presenters (students) and the titles of their posters:

Presenters (Oral)	Titles
Sara Bey University of Tennessee at Chattanooga	Experimental Studies of Transport Properties of Novel Amorphous Fe-Dy-O Thin Films
Jared Averitt Austin Peay State University	Re-unstable β^+ Source-Sample Sandwich for Positron Annihilation Lifetime Spectroscopy
Tristan Carlson University of the South	Energy Transfer and Photorefractive Effects in Mid-IR Laser Materials

Table 3 - List of meeting attendances (faculty):

Faculty	Affiliations
Tatiana Allen	UT-Chattanooga
Saeed Bejnood	PSCC
Spencer Buckner	APSU
Brooke Carter	L&N STEM Academy
Christine Cheney	UTK
Sean Cordry	Walters State Comm Coll
Cahit Erkal	UT at Martin

Allen Farvin	PSCC
Rudy Furman	Hardin Valley Academy, Knox Co Schools
Ron Henderson	MTSU
Richard Ignace	ETSU
Erica Johnson	Halls High School/University of Tennessee
Catherine Longmire	UTK
James Parks	UTK
Randolph Peterson	University of the South
James Sternberg	Hardin Valley Academy
Katherine Stone	Walters State Community College
John Varriano	Christian Brothers University
Zhenbo Wang	UTK
Nicholas Wolff	Lane College
Pei Xiong-Skiba	APSU

Table 4 - List of meeting attendances (students):

Students	Affiliations
Jared Averitt	Austin Peay State University
Sara Bey	University of Tennessee at Chattanooga
Tristan Carlson	University of the South
Matthew Donaldson	University of the South
Travis Jenkins	UT martin
Aaron Kirby	University of Tennessee
Nathan Williamson	University of Tennessee at Martin

Table 5- Officers of Elect (2019-2021):

Names	Titles
Nat Smith of Middle Tennessee State University	Chair of Elect (2019-2020)
Cahit Erkal of The University of Tennessee at Martin	Chair of Elect (2020-2021)
Spencer Buckner of Austin Peay State University	Section Representative (2012-2020)
Pei Xiong-Skiba of Austin Peay State University	Secretary/Treasurer (2012-2020)