



**Minutes of the 2018 meeting of the TAAPT
Lipscomb University, Nashville, TN**

**Annual Meeting of the Tennessee section of the American
Association of Physics Teachers
Friday, March 23 through Saturday, March 24 2018
Swang Center
Lipscomb University
Nashville, TN**

The 2018 Tennessee section of Association of American Physics Teachers' annual meeting was held in The Swang Center of Lipscomb University in Nashville, TN Friday, March 23 through Saturday, March 24, 2018. The meeting started with a banquet on Friday night at 6:00 p.m. in the Faculty Club of Bennett Campus Center. This was followed by a presentation given by the keynote speaker for the conference, Ms. Natasha McMann, an associate member of North America Nanohertz Observatory for Gravitational Waves (NANOGrav). Her talk was on how NANOGrav searches for gravitational waves using pulsar timing arrays.

The Saturday morning program started at 8:00 a.m. with registration and a continental breakfast in the Swang Center, followed by oral presentations in Room 110 and a student poster session in the lobby. Detailed meeting attendees and presenters are listed in tables 1, 2 and 3 near the end of this document.

The section business meeting was held immediately after the break of the oral presentations. It addressed several agendas:

- 1) The meeting approved the 2017 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 2018 and winter 2019 meetings.
- 3) Dr. Randy Peterson of University of the South made a short presentation on the Alpha's 2018 Laboratory Immersion Program, a program emphasizing labs for upper division physics courses. Additionally, he reported briefly the plan regarding the 2019 TAAPT meeting to be held in University of Tennessee at Knoxville.
- 4) Elect officers for 2018-2019, and Chair Elect (2020) - Drs. Spencer Buckner and Pei Xiong-Skiba, both from Austin Peay State University, were re-elected as the section representative and secretary/treasurer (2018-2019). Dr. Nathanael Smith of Middle Tennessee State University Murfreesboro, TN is the chair-elect for 2019-2020. (See table 4 for elected officers.)
- 5) The best student poster presentation went to Naomi Derksen, *et. al.* of Lipscomb University on *Effectiveness of Alternating Electric Fields in Interrupting Breast Cancer Cell Proliferation* with a monetary award of \$60. The second best student poster presentation went to Austin Harnage of Austin Peay State University on *Building a Cantilever Stain Gauge Load Cell* with a monetary award of \$40.

Box lunch was served at the end of the meeting.

We would like to thank Dr. Randy Bybee of Lipscomb University for hosting this successful meeting. The event was supported by the Department of Physics of Lipscomb University.

Pei Xiong-Skiba
Secretary/Treasurer, TAAPT
April 14th, 2018

Table 1 - List of meeting attendances

Faculty	Affiliations
Suman Neupane	Middle Tennessee State University
Randy Bybee	Lipscomb University
Pei Xiong-Skiba	Austin Peay State University
Randy Peterson	University of the South
Chuck Higgins	Middle Tennessee State University
Allen Farvin	Pellissippi State Community College
Alan Bradshaw	Lipscomb University
Cahit Erkal	The University of Tennessee at Martin
Spencer L. Buckner	Austin Peay State University
Nat Smith	Middle Tennessee State University
Bill Robertson	Middle Tennessee State University

Table 2 - List of oral presenters and the titles of their talks:

Presenters (Oral)	Titles
Pei Xiong-Skiba Austin Peay State University	Online Lab Grading
Nathanael Smith Middle Tennessee State University	Language Matters
Eric Bloodworth (student) Austin Peay State University	Neutron Stars Cooling and Decay
Suman Neupane Middle Tennessee State University	Effect of Practice Exam on Undergraduate Modern Physics Course
Cahit Erkal (by his student) The University of Tennessee at Martin	Autonomous Driving of a Wheeled Robot
Randy Bybee Lipscomb University	Driven Inverted Pendulum

Table 3 - List of student poster presenters:

Students	Affiliations
Austin Harnage Austin Peay State University	Building a Cantilever Stain Gauge Load Cell
Cord Beck Austin Peay State University	Near IR Fluorescence of Er ³⁺ Ions in Ga-Modified Ge-Sb-S Glasses
Margaret Seage Austin Peay State University	Thermal Properties of Bi and P Modified Ga-Ge-Se-Te Glasses

Naomi Derksen, et. al. Lipscomb University	Effectiveness of Alternating Electric Fields in Interrupting Breast Cancer Cell Proliferation
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Table 4- Officers (2017-2019):

Names	Titles
Christine P. Cheney of University of Tennessee at Knoxville	Chair-Elect (2018-2019)
Nat Smith of Middle Tennessee State University	Chair-Elect (2019-2020)
Spencer Buckner of Austin Peay State University	Section Representative (2012-2019)
Pei Xiong-Skiba of Austin Peay State University	Secretary/Treasurer (2012-2019)