

# William Thomas Campagna

## Profile

I am currently completing my B.S. in Physics and working part time as a peer tutor. I work closely with Dr. Eugenii Donev performing research in photonics.

## Education

### Austin Peay State University (APSU), BS in Science

August 2023 – Present

- Major: Physics
- Minor: Mathematics
- Degree Honors GPA: 3.017
- **Recent Coursework:** Calculus 3, Linear Algebra, Advanced Engineering Mathematics, Modern Physics, Optics

## Work Experience

### Peer Tutor, Center for Academic Support and Enrichment – Clarksville, TN

Oct. 2025 - Present

- Provide tutoring three times a week for Precalculus Algebra, Precalculus, and Calculus 1.

### Event Leader/Guide, Govs Outdoors – Clarksville, TN

May 2024 – December 2025

- Managed Govs Outdoors programs for rock climbing, hiking, camping, and other adventure-based coordinated trips.
- Presented *From the Classroom to the Real World: Rock Climbing* at the TIRSA Spring 2025 Conference hosted by APSU.

### Camp Counselor, Charleston County Parks and Recreation – Mt. Pleasant, SC

May 2023 - August 2023

- Performed regular duties, including managing communications between other counselors.
- Organizing educational activities and providing a fun summer experience for children ages 6 to 9 years.

## Volunteer Experience

### Physics, Engineering, Astronomy Outreach Events, Del Square Psi

- The club runs booths for schools and science events in which we demonstrate the magic of physics along with brief explanations on the fundamental forces at play.
- Demos Used: Tesla coil experiments, quantum locking demonstrations, angular momentum with a bicycle wheel.
- The club helps run public observation nights at the APSU observatory in which we set up telescopes, locate celestial bodies, and provide information about what we are observing.

### Dream Team – Lancaster, SC

- Gave young children with learning disabilities the opportunity to play baseball with college athletes.

### Community Service in the Dominican Republic

2021

- Performed a 3 km long beach sweep to help restore the environment. This included building and painting a house, providing clean water and food to people in need, and spending time getting to know the locals through baseball.

## Leadership Experience

### President of Emerald Hill Hall Council

2024-2025

- I hosted biweekly meetings with my fellow council members. In these meetings we coordinated monthly events for the school while planning around our yearly budget.

### Public Outreach Officer for Del Square Psi

2024-2025

- As a Public Outreach Officer for Del Square Psi, my role includes communication and planning for future events. I try to be ambitious in my role so that the STEM field can be accessible to everyone.

**Founder of the Del Square Psi Video Production Team** 2025-Present  
• As the founder and current leader of the DSP Video Production Team I manage a group of students in research and production of educational videos for various physics demos and concepts.

**Guided Hiking and Rock Climbing Trips** 2024-2025  
• I stay detail oriented when preparing to lead a guided trip. This includes detailed research about the area, holding meetings and safety briefs, providing demonstrations as well as presentations on the environment.

## Research Experience

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**Comparing Five Methods for Determining the Refractive Index of a Glass Prism Using a Multi-Wavelength Laser and a Versatile Optical Setup** 2025-Present  
• The research team is currently being aided and supervised by Dr. Donev in the Austin Peay State University Optics Lab.  
• I presented an update to the research alongside Keira Scott in Denver, Colorado at the Society of Physics Students Conference on October 31st 2025.

**Atmospheric-Unified Radiation Assessment with Multi-Fidelity** 2025-Present  
• Independent research into computational physics methods used to model micro-climate systems and photon transport.  
• The research goal is to successfully model a tightly coupled physics simulation using the Navier-Stokes Equations and the Boltzmann Transport Equations.

**The Effects of Exercise on the Central Nervous System** 2021-2022  
• Research was funded by a program through the East Cooper Center for Advanced Studies.  
• The research included a systematic review of six publications regarding the topic.  
• I presented all research findings at the East Cooper Center for Advanced Studies during May of 2022.

## Awards and Certifications

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• 1st place in the 2023 Great Green Ideas Contest at APSU 2023  
• Project Lead The Way, White Lab Coat Award May 2022

## Organizations

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**Society of Physics Students** Sept. 2025-Present  
• As a member of the Society of Physics Students I have attended the 2025 SPS Conference and worked with a selection of students to produce a video documentary highlighting the research and events at the conference.

**Sustainable Campus Fee Committee Member** Feb. 2024- Aug. 2025  
• Being a member of the Campus Fee Committee put me in a position to vote on how the budget is spent towards making a greener and more inclusive campus.

## Relevant Skills

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### Soft Skills:

- Strong ability to communicate complex ideas
- Comfortable working in a team environment
- Creative and adaptable use of problem solving skills

### Software:

- Proficiency in the Microsoft Environment (Word, Excel, Powerpoint, etc.)
- Matlab (Novice)

### Programming Languages:

- Python (Intermediate)
- Fortran (Novice)