

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

- 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

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

Organizations

- 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

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)