

Allen Li

Junior

Hobbies: Physics, Choir, Piano, Building/coding random stuff

Clubs: Science Olympiad, Physics and Engineering, Crystal Children's Choir

Contest/Competition Experience: Science Olympiad States Division C First Place Team (2024), AIME Qualifier (2024), Certificate of Merit Level 9 States Honors (2023), USAPhO Silver (2023), USAPhO Honorable Mention (2022), USACO Gold (2022), Science Olympiad Nationals Division B Second Place Team (2022), Science Olympiad Nationals Division B First Place Team (2021)

Autobiography:

"Why?" is a question I've always asked. Science was always the one to give the answer.

My physics teacher has a mini story about physics he loves to tell. Ask your biology teacher a biology question, and they'll answer with biology. Keep asking them why, why, why, and they'll tell you to talk to a chemistry teacher. Ask them why, why, why, and they'll tell you to talk to your physics teacher. Keep asking why, and your physics teacher will tell you to talk to a priest. Physics lies at the foundation of science, and its ability to explain (almost) anything has had me fascinated for the past few years.

My interest in physics began when my parents signed me up for Science Olympiad in middle school. Though it was an exciting new adventure, Science Olympiad gave me an extremely skewed journey into physics. I was trying to grapple with the Second Law of Thermodynamics and use delta-wye transformations on circuits before I even knew what gravitational acceleration or an electron was. Many of the problems were simply plug-and-chug, but I found joy in seeking out the occasional gem of a problem that required a unique observation or elegant simplification. Those problems were few and far between, though, and this unusual experience left me with what felt like tiny islands of knowledge, encouraging me to explore more in this world of physics.

I joined my high school's Physics and Engineering club because, well, physics. There, I was encouraged to try out the $F=ma$ exam. When I just barely qualified for the USAPhO that year, I decided to take it for fun and have a laugh at how little I thought I knew about physics. As it turns out, those small bits of physics I had learned from Science Olympiad gave me enough insight to understand the basic principles behind the problems, though I completely lacked the ability to actually solve any of them.

The next year, I barely qualified again. AP Physics 1 had given me a little more experience solving physics problems, but without calculus, I didn't stand a chance and only really solved the very first part of each problem. Somehow, I still managed to earn a silver medal, which gave me a huge amount of motivation to go full-in and study for this year.

Through the continued support from my parents, who always encouraged me to follow my passions, and my physics teacher, Mr. Birdsong, who answered many of my curiosities in physics and lent me his physics textbooks to study, I was able to not only break my streak of scoring exactly the cutoff but also make it to camp. To them, I am forever grateful, and I'll always remember their support as I continue my exploration of physics.