

Langming (Merik) Xing

Junior

Hobbies: Running, Playing the Piano, Video Editing, 3D Modeling and Rendering, Baseball, Ultimate Frisbee, (Watching) Racing, Rubik's Cube, Playing Genshin Impact

Clubs: Audio/Video Club (Founder & Co-Leader), Science Bowl Club, First Tech Challenge

Contest/Competition Experience or Honors: U.S. Physics Team (2024), USAPhO Gold (2023), USAPhO Honorable Mention (2022), USAPhO Qualifier (2022-2024), AIME Qualifier (2022-2024), AP Scholar with Distinction (2023)

Autobiography:

Watching baseball in 2nd grade, I was obsessed with the trajectories of curveballs and sliders. Years have passed. I never succeeded in throwing a satisfying curveball, but I did start learning Physics in the summer of 8th grade, a subject that can explain so many such phenomena, and will accompany me during most of my free time in high school.

In November of my freshman year, my Physics teacher Mr. Tian introduced me to the $F=ma$ exam. After 3 months of practicing past exams and learning new concepts along the way, I qualified for USAPhO 2022 with exactly the cutoff score. I got an Honorable Mention and that encouraged me to do better next year.

In my sophomore year, I learnt Mechanics and E&M in greater depth and it took me until early March to finish them. It was a challenge to learn Thermodynamics, Optics, and Special Relativity in three weeks. I was extremely lucky that USAPhO 2023 involved quite a lot of topics about Mechanics, E&M, and I earned a Gold Medal. This was a wonderful moment for me. I felt my hard work paid off and set my goal to qualify for camp in junior year.

This year, I was much more attentive to time management and focused on topics other than Mechanics and E&M. I also went through Kevin Zhou's handouts as a review. The problems on Kevin Zhou's handouts are more "creative" than those in the books I read before. I often have to make assumptions - sometimes almost as games. Although I have the attitude "just assume x,y,z , then believe it will work" while doing problems, there is usually a satisfying physical explanation behind those assumptions. I believe this is one of the unique features of Physics, being more flexible than Math, but also more logical than Chemistry. Now looking back, studying for USAPhO is just like solving such Physics problems. I assume I can understand this book, I assume I can finish this topic in 2 weeks, I assume my effort will pay off... Before I got the "final answer," I was never sure whether my assumptions were correct, but my best bet is to believe in them and work my way through.

Finally, I'm truly grateful for AAPT's invitation and these years' encouragement via US Physics Team members' biography (If you are studying physics now, I hope everything above can inspire you:)). I want to express my sincere gratitude to my teacher Dr. Kirk for teaching me modern physics and proctoring this exam, to people like Kevin Zhou and Dr. Guo for posting their handouts or video lessons online, to my friends and some of their parents for helping me relax and motivating me, and to my family for supporting me, especially my dad for trying to study together with me. Without you all, my possibility of getting here will be a limit approaching zero.

I can't wait to meet everyone this summer!