

William Huang

12th Grade

Hobbies: Acrobatic layups in pickup basketball, absolute domination in word hunt, lifting weights and no cardio, flagging people in online chess, avoiding all the weird fruity chocolates.

Clubs: Lynbrook ASB Legislative Council (leg day every day), Students for Literacy Club, Youth Activities for Kids Club, Science Club, Astrophysics Club, Science Bowl.

Contest/Competition Honors: IPhO Gold Medal, 2x IOAA Gold Medal, IESO team, IAO team, 18x not a USAMO qualifier, OPhO 1st place (shoutout to Alex Gu and Jennifer Song).

Autobiography:

If you say the word physics, a mix of emotions take hold of me. I don't know whether not to feel excited for an elegant mechanics problem, shake my head at the Lagrangian of the Standard Model, scoff at a poorly disguised math question, or be in awe of the beautifully accurate predictions of quantum mechanics. But I'll be honest: when you say the word physics, I get a little scared, because my first experience with Olympiad physics slapped me across the face.

You see, back in the day, Lil Will was not a physics aficionado nor a math whiz kid. Inspired by the heroics of unexpected superstar Jeremy Lin, eight-year-old William had dreams of hooping his way into the NBA (anything is possible). After years of practicing fadeaway Js and trash talking, Lil Will confidently walked onto the middle school basketball team tryouts, bricked several layups, got cut from the team and started a career in physics.

There was only a slight problem with my sudden career switch: back in the day, I wasn't nearly mature enough to passionately dive deep into and explore a subject. It wasn't uncommon for me to be in detention for starting a fight (violence is never the answer...) or for refusing to listen to frustrated middle school teachers. Yet even then, I could feel within my Cheez-it-filled blood that urge to know why a basketball travels furthest when launched at a 45 degree angle or how to get frost off the windshield in the mornings. So I haphazardly waded through various physics material, enjoying content such as Veritasium or the Foothill College Physics Show.

Eventually, when I sat down to take my first $F=ma$ exam, the result of my idle textbook flipping and unorganized video consumption was clear. My lack of physics understanding, the trickiness of the problems, the time pressure, and the donut holes I munched on prior all conspired to make my hand shake so much I couldn't even bubble in answers properly. This was the exact moment I discovered the complexity and depth of physics (a different animal and the same beast); the difficulty almost made me quit right then and there.

To all the readers out there struggling through any level of physics, I want to tell you about one of the best choices I have ever made: following the $F=ma$, I stuck with physics because I was hopelessly in love with the subject. If not for that choice, I may have never explored the

elegance of phasors in AC circuits or the mysterious and miraculous WKB approximation in quantum mechanics. If not for that choice, I may have never developed the problem-solving skills, perseverance, and confidence (when I get a cut, I think I'm top 5) that I possess today. If not for that choice, I may have never met some of my best friends and experienced the supportive community of competitive physics across the world. To revise my statement from earlier: if you say the word physics, a mix of emotions take a hold of me because of the amazing memories I've made and endless opportunities the subject has opened.

Gargantuan thanks to my family for being incredibly supportive of my passion for physics, my friends for sticking with me both within and outside of physics competitions, and Kevin Zhou's goat physics handouts for being endlessly entertaining.