

**Name:** Luke Huang

**Current Grade Level:** Junior

**Hobbies:** Reading, Crafting Poetry, Baking, Violin

**Clubs:** Sustainable Lower Fairfield County, Renewable Energy Club, Math Team, New Canaan High School Courant, Cross Country Team

**Contest/Competition Experience or Honors:**

US Physics Team Qualifier (2022, 2023), USAPHO-Plus (2021), Mathematical Olympiad Program Attendee (2022), USAJMO (2021, 2022), USAMO (2023)

**Autobiography:**

*“If an apple falls, does the moon fall too?”*

I’ve learned gravity three times for this question.

It all started with Michio Kaku’s gesticulative retelling of Newton’s brilliance. I thought the answer was obvious: no, the moon can’t be falling since it’s always floating in the sky.

The moon, as it turns out, is not just floating in the sky like a balloon. It’s a massive rock hurtling through space at unbelievable speeds. And just like an apple falling from a tree, the moon is constantly falling through space, locked in an intricate dance with our planet that never quite reaches the ground. That was the first time I thought I had laid that question to rest.

Years later, in my 8th-grade science class, from Tycho and Kepler, I found descriptive laws for planetary orbits. It was a captivating framework that shed light on the behavior of celestial bodies, apparently closing the case for me once and for all.

But that was not the end.

In my freshman year, the COVID-19 pandemic granted me an abundance of free time, prompting me to explore a plethora of online physics resources. Armed with Newton’s laws and armed with time, I delved into the realm of differential equations, seeking mathematical certainty. Through this pursuit, I eventually arrived at the belief that, much like an apple, the moon does indeed fall.

Yet, even with this conviction, I still can’t be sure. The captivating realms of general relativity and quantum gravity introduce further complexities and perspectives to consider.

For all its elegance and beauty, physics can be a humbling subject. No matter how much I think I know, there's always more to discover, more to explore, and more to learn. It's a never-ending journey, one that requires a willingness to unlearn old ideas and embrace new ones.

But I'm also grateful for the teachers who have guided me along the way. To Mr. Reid, for being an inspiring teacher who has taught me there is so much to rediscover and reconsider, to Ms. Liu, for showing me the beauty of mathematics and physics, and to the AAPT, for providing me with a community of fellow physics enthusiasts, I owe a debt of gratitude.

With their help, I aspire to continue my never-ending quest for knowledge, to embrace both the familiar and the unexpected, and to embark on a perpetual journey of exploration and rediscovery in the wondrous realm of physics.