

Name: Christy Li

Grade: Junior

Hobbies

Playing volleyball, baking muffins, eating said muffins, taking pictures of my dog, reading sci-fi and dystopian, watching anime

Clubs

School newspaper, math team, physics team, FBLA, DECA, girls' volleyball team, MATHCOUNTS coach

Experience

AIME, MPfG, HMMT, ARML, Physics Bowl, ScienceMONTGOMERY 1st place math and physics

Autobiography

I don't remember much about my life before middle school, but I can imagine it consisted mainly of me fangirling over the *Harry Potter* series and perfecting various iterations of the mud pie. In 7th grade, I happened to read Madeleine L'Engle's *A Wrinkle in Time* for a school book club. Throughout the book, the characters travel to distant planets across the universe by folding space time and connecting two distant points with a "tesseract", a concept inspired by the Einstein-Rosen bridge. I was immediately gripped by the science that inspired this fiction, and decided then and there that discovering the first ever wormhole was my true calling in life.

Entering high school ready to learn the elusive secrets hiding in the depths of space, I was immediately taken aback when my introductory physics class did not in fact cover general relativity. Instead, we studied the mechanics that affected our everyday lives. I remember in particular seeing a demonstration of a marble rolling down a track with a vertical loop during our study of conservation of energy and centripetal motion. Hearing the marble "roll harder" along the bottom of the loop while practically gliding across the top reminded me of the feeling of being squished at the bottom of loop-the-loop roller coasters compared to the weightlessness at apex. These connections made me fall in love with physics all over again as an experience I could relate to.

Back then, however, few of my close friends shared my interest in physics. There were also well-intentioned adults in my life who would tell me, *Physics isn't really something girls do, are you sure you don't want to try studying X instead?* I ended up internalizing a lot of those messages, but I wasn't ready to give up on physics entirely. As a result, my relationship with physics became a very private affair. This setup came with its own benefits and challenges. I knew for a fact that I wasn't studying physics for anyone's sake but my own, and I reveled in the feeling of being able to teach myself something new about my own experience in this world.

I think there is something incredibly powerful and unique about living and breathing the world that you study, and studying the world that you live and breathe. The fact that there is order to the universe and that things obey without exception laws that we are able to discern and predict is mind-boggling and a real testament to human curiosity. I am so honored to be part of the U.S. Physics Team and I especially look forward to being a part of the broader physics community.

I would like to thank Mr. Schafer and Mr. Schwartz for being incredible teachers who support me inside the classroom and out, and for always taking proactive steps to create a learning environment where everyone feels comfortable and welcome. I would also like to thank my parents for unconditionally supporting me in whatever strange pursuit I set my heart on, and Dr. Tang for teaching me to appreciate the beauty in the rigor that underlies physics and all of its governing laws.