Adam Zweiger
11th grade (class of 2023)

Hobbies
Chess, Tetris, Tennis, GeoGuessr, Anime, Piano, Anime Piano, Programming

Clubs
Computer Science Club, Chess Club

Contest/Competition Experience or Honors
USAJMO Qualifier (2021), USAMTS Perfect Scorer (2021), USACO Platinum Division Qualifier (2021), Canada/USA Mathcamp (2021, 2022), HMMT, SMT, CMIMC, CHMMC, FB Hacker Cup

Autobiography
When I was seven years old, I remember looking at the sky and asking my mother, "why is the sky blue?" My mother responded to me that the reason was due to Rayleigh scattering.

Now that I think about it, she probably googled that. Either way, I've always been fascinated with thinking about our world. Since elementary school I've enjoyed watching YouTube videos about science, especially physics, by channels like Vsauce and Veritasium. I was captivated by their videos on the insanity of subatomic particles and black holes and interesting spinny experiments involving wheels. While I wasn't able to understand any of the mathematics behind what I learned back then, it sparked my fascination with physics, which has been my favorite science ever since.

My journey into learning more serious physics started pretty late compared to some of the other campers here. In ninth grade, I was starting to get advanced in math, having finally qualified for AIME and started taking multivariable calculus at my high school. I decided I wanted to branch out and see how the math I was learning could be applied to other areas. I'd always wanted to learn the theory behind the interesting physics concepts that I'd heard so much about when I was younger, so I chose what was clearly the best option, physics, and decided to sign up for an introductory class on mechanics.

I really enjoyed learning about mechanics, and when the F=ma contest came around about a year ago, I entered with hopes to do very well, but ended up missing the USAPhO cutoff by two points. I was pretty disappointed since I had thought I learned enough to pass. However, this setback did not hinder my interest in learning more physics. Over the next year, I took more classes and read more of *Halliday Resnick and Krane* and *The Feynman Lectures*. I became enthralled in the beauty of the geometry of Minkowski spacetime and, of course, penguin diagrams. As I eagerly pursued the answers to my neverending questions, I greatly expanded my knowledge of physics.

I am excited and honored to be a part of the team this year. I would like to thank my middle school math tutor, Allan, for teaching me everything from Algebra I to PreCalc in a year, showing me how to learn, and running an excellent restaurant; Mason, for answering all of my physics questions; and, of course, Dr. Tang, whose class guided me through learning much of what I know about physics. Finally, I would like to thank my parents for being pretty cool parents and telling me about Rayleigh scattering.