Zhiyuan Liu 11th Grade

Hobbies: I love playing badminton and am also very interested in history. I have been spending a lot of time reading history-related materials.

Clubs: Physics Club (the main founder of the Physics team in high school), Math Club, Mimic United Nation Club

Contest/Competition Experience or Honors: BPhO top gold(2023), AIME(2024), first prize in the Analytical Geometry Competition(2023), second prize in the CPhO Semifinals(2023).

Autobiography:

My personal experience with physics began when I was ten years old. At that time, my father bought me a set of Feynman lecture handouts. Needless to say, it was so difficult that I almost understood nothing, as I did not have any basic physics or math knowledge. It left me with an indelible impression of how hard and abstract physics can be. In my elementary and middle school years, I attended a lowranking public school where I hardly received any knowledge for physics competitions. The beginning of my studying of physics officially was largely a coincidence, which started as an ordinary summer of my sixth grade when I happened to see the MIT open course 8.01 on Mechanics. It suddenly dawned on me that the world could be analyzed at a fundamental level, which greatly aroused my passion. Since then, I have had a high interest of physics. Due to the limited resources available at my school, I mostly learned physics by myself and throughout the whole course of studying I did not go to any tutoring institutions for physics competition.

It was only one year ago that I first heard of the USAPhO when I made the decision to immigrate to the USA. After that, I had been preparing for the test and most importantly, studying higher levels of physics for pleasure. When I heard about getting into this physics team, I couldn't help but recall all of the difficult moments of the past: how many times I had to go back again and again a problem that maybe occurs someplace in my bookshelf, just because I forgot the solution to the model, how many times I had to overcome the great psychological gap that I actually knew nothing which I thought to have understood, how many times I was so helpless that I had to ponder for a long time just because there is no one I could turned to for physics questions, and finally leave it for time, how many times I was so upset even to move on when working on a physics test for half a day, only to find that fact that I had not done a single problem right, how many times I thought it was too hard and that I bear no chance to make it into the competition or even not having a chance to continue studying physics. One can hardly understand how frustrating it could be when faced with more than 80% of the problems in a book are beyond your ability to even understand the analysis. Even after that I eventually made it because physics is a passion for me. Born in a circumstance that almost no physics help is accessible, it was nothing but the enthusiasm for physics that the support of my parents to keep moving forward. I've always been told that it was too late to begin when you are already a sophomore, especially since most of my classmates in the training groups began when they were in their elementary schools. I believed that as long as someone kept the interest and passion for physics, we can begin at any time!