

One of my ambitions is to be part of a group of theoretical physicists interested in the dark matter of the night sky, in search of the origins of the universe. I know this work will not be easy: at times, the night sky appears as complex as a paradigmatic labyrinth designed by Daedalus. But, before I can properly contemplate such work, before I can hope to shed light on the darkest corners of this perplexing maze, I first need to acquire the skills that only a university degree in physics can provide. And, having recently returned to Europe, and, having largely been taught in English, Britain is the obvious choice for where I should continue my undergraduate studies.

My intrigue with the night sky began -at age eight -when I was given a telescope. With it, I studied the various phases of earth's moon. The moment I spied the foreign, crater-laden far ("dark") side of the moon, I was immediately intrigued. Which makes sense: From the moment I learned how to overcome my fear of the dark by, paradoxically, embracing it, I have been intrigued with the darker, unknown elements of my world.

But, during this time, I had, at best, only a rudimentary knowledge of the scientists who explored the deepest mysteries of the universe. Later, as my knowledge grew, I learned about the enormous contributions to theoretical physics made by such individuals as Brian Greene, Werner Heisenberg, and Richard Feynman, who spent their entire professional careers probing the darkest corners of the night sky. Their dedication has inspired me to now seek to follow in their lead.

Meanwhile, at school, my introduction to the study of physics involved exploring physical motion by attaching objects -of varying weights-onto a string -at varying angles -and recording their respective speeds.

The more I learned about physics, the more I desired to explore this fascinating subject. Around this time, I joined an after-school model airplane club, learning how to efficiently convert the kinetic energy of moving air into mechanical energy.

During this time, my interest in physics continued to evolve -both inside and outside of school. But, last year was pivotal in my decision to become a theoretical physicist. At the start of the year, I joined the physics club, at school, where, each week, the club members were presented with intricate physics questions we had to work together to solve.

I also helped lead a team of ten individuals who took part in N.O.V.E's parabola project competition. As part of the competition, our team had to submit a detailed description of a series of experiments we wanted to perform in microgravity. I proposed studying the effects of microgravity on the trajectory of a stream of water propelled through a syringe.

All of these experiences were utterly ineffable. The best I can say is whenever I perform physics experiments, I receive an instant 'dopamine rush.

And yet, all of these invaluable experiences -due to the covid crisis -required virtual communication via a computer. But, what about those students who could not afford a computer.

In order to rectify this situation, last year, I helped start an organization, named flash, which collected and distributed donated computers to such underserved Students.

Given my grades in mathematics and physics at school, I am confident that I would be able to succeed in a demanding physics course. But there is another, much more personal, reason why I want to study the night sky. As a child, I was terrified of the dark, so much so that I would not leave my bed, at night, even to use the restroom.

One day, my grandmother took me out to a bench in her backyard garden in the southwest of France. She pointed up at the dark spaces in the night sky, explaining, as a young girl, she used to sit in the garden, with her grandfather peering up into the same darkness, not in fear, but, in awe.

From that moment on, I stopped fearing the dark; instead, I started embracing it-so much so that I now seek to dedicate my professional life to studying the 85% of the night sky composed of such dark matter.