

Interview Assessment #1

Name: Dr. Michael Henry Kesden

Profession: Astrophysics

Location: University of Texas at Dallas

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In my first research interview, I wanted to understand the specific steps I have to take in order to be a successful astronomer. As I was talking to Dr. Kesden, I had learned that the process of obtaining a PhD and getting a spot in the scientific research community is extremely competitive. This definitely gave me a different perspective of how this field works. Dr. Kesden then told me what exactly I should do in order to earn a spot in the research world. He talked about how I should start thinking about what my PhD thesis will cover and how it may impact the world. To add on to this, he emphasized how my thesis should be something that people (the public/government) are interested in because if they are not interested in it, they won't invest any money in you and as a result your research work might get ignored. I found it extremely helpful when he gave this advice because when I come to that stage of my life, I will know exactly know what to do and in the process save a lot of money and time.

In addition to this, we discussed about the coursework that I have to take in order to be prepared for astronomy. He stressed on how I need to take as many math and science classes during high school as it will provide a solid foundation for this field.

I was very glad to hear this because the courses this year are mostly based off of the career I've chosen. Dr. Kesden also recommended certain books that are considered as the "bibles" of astrophysics. For example, he suggested that I should read Stephen Hawking's popular book, A Brief History of Time. Through this discussion, I identified the complexity of astrophysics.

After we talked about the path to become an astronomer, we spent a considerable amount of time talking about black holes and even a multi-dimensional universe. He started off by talking about his own research work on black holes. The topic of black holes is something that I was always interested and curious about. Dr. Kesden took the time to carefully teach me the mechanics of black holes. Additionally, he clarified on what white holes are so I can get a better understanding of the physical components of the universe. I learned that white holes was an idea that emerged from an equation. He later also explained the idea of having a multi-dimensional universe. He was kind enough to demo certain things so I can understand it better as I haven't sat down in a college level astrophysics class. I was shocked by what scientists have found so far in astrophysics. Dr. Kesden also talked about his experiences when he worked with or under very prominent astrophysicists. Specifically, he talked about the time he met Stephen Hawking and how he knew one of the physicists that detected the gravitational waves, last year. All of his experiences reminded me why I love this field. This interview helped me understand astronomy, specifically astrophysics a lot. After that interview, I felt very proud that I decided to pursue a career in astronomy.