

# Interview Assessment #4

**Name:** Dr. Jodi Cooley

**Profession:** Astrophysics

**Location:** Southern Methodist University

**Date:** October 6, 2016--- 9:30 AM

Dr. Cooley is currently the associate physics professor at Southern Methodist University in Dallas, TX. Dr. Cooley's research interest primarily focuses on understanding the nature of dark matter, one of the greatest mysteries of our universe. Additionally, Dr. Cooley is part of the team that operates a set of intricate detectors at the Soudan Underground Laboratory. These specific detectors can differentiate between dark matter particles and background particles that may create inaccurate data. Apart from her work, she has obtained multiple awards for her research. For example, she got the Early Career Award from the National Science Foundation and the Ralph E. Powe Jr. One of the other awards she received was the December 2012 Woman Physicist of the Month by the American Physical Society's Committee. Overall, her work and achievements have proved that she is a very successful astrophysicist.

We first began talking about dark nature and dark energy. Prior to our conversation about this, I didn't understand this aspect of our universe because of its unknown complexity. However, Dr. Cooley broke down the major elements of dark energy/matter and explained it in detail to me. After she explained these things to me,

I really understood the nature of dark matter and dark energy. I also really admired the passion she had for this study. She really took the time to give me her input on dark matter/energy. After talking about the scientific aspect of this field, we both had a very detailed conversation about the education/experience required for astrophysics. I found this part of the interview to be really useful because Dr. Cooley provided me with different undergraduate options that would help me with my career in astronomy. She first spoke about going in the physics route: what I should expect, advantages. And disadvantages. She then gave me the other option of doing biophysical sciences your undergrad years. Before she told me about this degree, I never knew that I could major in this to be successful in astronomy. However, this would be one of the best because as I learned from Dr. Cooley, the degree makes you gain a vast amount of knowledge in physics, biology, and chemistry. With that said, she also mentioned that if I chose this degree plan then I would not be able to double major because technically I will be triple majoring. Apart from this, she also gave me important advice on how to handle gender bias in college and also the work place. To make it more relatable to me, Dr. Cooley gave me some of her own experiences and how she handled it. One of the last things she discussed with me is scholarship opportunities. She told me to apply to both public and private colleges because sometimes private colleges could be a lot more affordable because of private donations.

Overall, I truly felt that this interview gave me a different perspective into the field of astronomy. Dr. Cooley's method of explaining topics really showed me what the study consisted of and also her own character. I could thoroughly understand that she

does her work to help the lives of millions of people and I strongly believe that she has done. Her passion for this field has definitely inspired me to love astronomy even more.