

I aspire to obtain Summa Cum Laude when I graduate in the Spring of 2022. I hope to accomplish this goal by continuing high performance in my courses. After graduation, I plan to pursue my PhD in physics. I would like to become a professor at a university after I successfully receive my degree and postdoc. If I do not become a professor, I would like to do theoretical research for NASA in Sandusky, Ohio. Lastly, if I cannot do either of these, I would like to conduct my own research by beginning my own academic lab.

This year I will be studying the origins of the universe by researching the dynamics of charged matter with magnetic monopoles. I plan to do this theoretically, by implementing both analytical and computational techniques. I will use the Mathematica platform for my numerical analysis. My mentor and I are hoping to provide a diagnostic to aid in the search for magnetic monopoles as well as obtain additional insight into the properties of magnetic monopoles.