

If I had been told three years ago that I would soon be on my way to completing a Bachelor of Science degree in Astrophysics, I wouldn't have believed it—when I first enrolled at the University of Toronto, it was with the intent to pursue a degree in English. During my first year, however, it wasn't my English class that sparked my interests; instead, it was an introductory astronomy course I'd taken to fulfill a breadth requirement. By the end of the first class I'd already started to question my chosen field of study, and by the end of the semester I'd switched tracks entirely and begun my journey into the field of astrophysics.

I am applying to the Summer Undergraduate Research Program because I have a deep interest in astrophysics and wish to gain experience in the field. I want to expand my knowledge not only through lectures, but also by actively participating in research currently being undertaken. Through involvement in the program, I also hope to make contacts with both professional astronomers and my peers within the community. Further, I hope to improve my computational and research skills, learn more about the topics that interest me, and participate in public outreach programs.

Although I am fascinated by astrophysics at large, my particular interests lie in the formation and detection of exoplanets and planetary systems. After completing a project on this topic, I became interested in doing further research into the formation of exoplanets in stellar systems both like and unlike our own. I hope to one day be able to contribute my own research and observations to the growing database of exoplanets, and to learn more about the processes through which these systems formed.

Outside of the world of research, I am also interested in public outreach programs, particularly those focused on women with interests in astronomy. I feel very strongly about the importance of sharing astronomy with the public, as well as the impact that it can have—indeed, the entire direction of my academic career was changed after a simple introductory course. Through participation in the SURP, I hope to be able to both delve further into the topics that interest me as well as share these interests with the public.

I am currently in my third year at U of T pursuing a BSc. in Astronomy & Physics, and I hope to be able to continue on towards a PhD. in Astrophysics from either U of T or another strong, research-oriented institution. My current academic aspirations are to maintain my high average until graduation, and to then be admitted into the direct-entry PhD. astrophysics program at U of T. After this, I hope to be able to teach and complete research in the field, as well as to make observations and collect data from partner institutions worldwide. Participating in the SURP would be my first step towards accomplishing these goals, and it is for these reasons that I am applying to the program.