

As a fourth year student of the University of Toronto's Astronomy & Astrophysics specialist program, I am excited at the opportunity to apply to the Dunlap Institute's 2016 Summer Undergraduate Research Program. I was a participant in SURP last summer, and strongly feel that the opportunities that were available to me through the program—including research, outreach, and networking—were invaluable for both my academic and career growth. I hope to be able to gain further experience in all of these areas through participation in SURP again this summer.

I am applying to SURP because I have a deep interest in astrophysics and wish to further my experience in the field. After having completed two separate astronomy research projects over the past year—a theoretical research project on pulsars at the Canadian Institute for Theoretical Astrophysics through SURP, and an analysis of pulsating variable stars through the University of Toronto's Work-Study Program—I firmly believe that the best way to gain skills and experience in the field is through active participation in ongoing astronomy research.

Although I am fascinated by astrophysics at large, this summer I hope to be able to complete a project relating either to observational astronomy or planetary systems. I'm interested in carrying out research outside of the areas I've previously studied in order to expand my knowledge and experience in all astrophysics fields. That being said, I'm very interested in research through all four partner institutions working with SURP this summer, and would love the opportunity to participate in any astronomy-related research program.

Outside of the world of research, I'm also very interested in public outreach opportunities. I have recently been appointed a TA for the introductory astronomy course AST201, and I hope to use this as an opportunity to share astronomy with members of the general public. My particular outreach-oriented interests lie in programs targeted at women in astronomy. I was a participant in the 2016 Canadian Conference for Undergraduate Women in Physics, where I presented my current research and participated in outreach programs. Through participation in SURP, I hope to be able to delve further into the topics that interest me as well as share these interests with the general public.

I am currently pursuing a BSc. in Astrophysics, English, and Mathematics at the University of Toronto, and I hope to be able to continue on toward a PhD. in Astrophysics from either U of T or another strong, research-oriented institution. My current academic aspirations are to maintain my high GPA 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 collaborate with partner institutions worldwide. Participating in SURP last summer was a huge step forward in meeting these academic and career goals, and it is for these reasons that I am applying to participate in the program again this summer.