

Emma K. Jarvis

Department of Astronomy & Astrophysics
University of Toronto
Email: emma.jarvis@mail.utoronto.ca

EDUCATION

UNIVERSITY OF TORONTO	SEP 2023 –
<i>PhD, Astronomy & Astrophysics</i>	
SUPERVISOR: Prof. Laurie Rousseau-Nepton	

UNIVERSITY OF TORONTO	SEP 2018 – JUN 2022
<i>H.B.Sc., Astronomy & Physics (High Distinction)</i>	
THESIS: <i>The effect of star cluster formation on future star formation in the Serpens South protocluster.</i>	
SUPERVISOR: Prof. Rachel Friesen	

PUBLICATIONS

Friesen, R., **Jarvis, E.** *The stability of dense cores near the Serpens South protocluster*, 2024, ApJ 969 70

AWARDS

Ontario Graduate Scholarship	SEP 2024
University of Toronto, (\$15,000)	
GSC Best Poster Award	JUN 2024
CASCA Annual General Meeting (\$100)	
Graduate Entrance Scholarship	SEP 2023
Mary Louise & Ronald Laidlaw Martin Scholarship (\$3,000)	
Summer Undergraduate Research Program Award	SUMMER 2022
David A. Dunlap Department of Astronomy & Astrophysics (\$9,500)	
Dean's List Scholar	JUN 2022
University of Toronto	
Regents In-Course Scholarship	AUG 2021
Victoria College, University of Toronto (\$1,000)	
Undergraduate Summer Research Fellowship	SUMMER 2021
Canadian Institute for Theoretical Astrophysics (\$8,500)	
The Doris Preston Scholarship	SEP 2018
Victoria College, University of Toronto (\$3,000)	

TALKS

DESI MWS Workshop	Toronto, Canada
<i>[20 minutes] Characterizing the GD-1 stellar stream with DESI data.</i>	AUG, 2024
McMaster Star Formation Workshop	Hamilton, Canada
<i>[12 minutes] HII region candidate identification in M94 with SIGNALS.</i>	AUG, 2024

POSTERS

CASCA Annual General Meeting <i>NGC4736 with SITELLE: H II Region Identification.</i>	Toronto, Canada JUN, 2024
Spring Symposium, Recipes to Regulate Star Formation <i>NGC4736 with SITELLE: H II Region Identification.</i>	STScI, Baltimore, USA APR, 2024
SURP Poster Presentations <i>The stability of dense cores near the Serpens South protocluster</i>	University of Toronto AUG, 2022
SURP Poster Presentations <i>Simulating the core collapse supernova explosion mechanism.</i>	University of Toronto AUG, 2021

UNDERGRADUATE RESEARCH EXPERIENCE

Summer Undergraduate Researcher David A. Dunlap Department of Astronomy & Astrophysics, SURP Supervisor: Prof. Rachel Friesen <i>The stability of dense cores near the Serpens South protocluster.</i> Characterizing the gravitational stability of dense cores in the Serpens South protocluster and surrounding filaments of dense molecular gas.	MAY - AUG 2022
Undergraduate Research Course University of Toronto Supervisor: Prof. Rachel Friesen <i>Star formation near the Serpens South protocluster.</i> Studying the hierarchical structure, kinematic properties and gravitational stability of dense molecular gas in the nearby, young, clustered, star-forming region, Serpens South.	SEP 2021 - APR 2022
Summer Undergraduate Researcher Canadian Institute for Theoretical Astrophysics, SURP Supervisor: Dr. Almog Yalinewich <i>Simulating the core collapse supernova explosion mechanism in one dimension.</i> Using diffusion to model the effect of turbulence in one dimensional simulations of the core collapse supernova explosion mechanism.	MAY - AUG 2021

TEACHING EXPERIENCE

Teaching Assistant, University of Toronto <i>AST326: Practical Astronomy</i> Graded lab reports.	FALL 2024, WINTER 2025
Teaching Assistant, University of Toronto <i>AST201: Stars and Galaxies</i> Lead tutorials, wrote homework problems, and invigilated the midterm and exam.	WINTER 2024
Teaching Assistant, University of Toronto <i>AST101: The Sun and Its Neighbours</i> Lead tutorials, conducted oral interviews, and invigilated the midterm and exam.	FALL 2023

MENTORSHIP

Undergraduate mentor <i>University of Toronto</i> Mentor for 2 upper-year undergraduate astronomy students at the University of Toronto.	2024 - 2025
---	-------------

OUTREACH & VOLUNTEERING

AstroTours Executive <i>University of Toronto</i> Promoted monthly public talks by UofT astronomers.	2023 - 2024
---	-------------

Astronomy on Tap Volunteer
University of Toronto

2024

Coding the Cosmos Volunteer
University of Toronto

JULY, 2024

Worked with a group of high school students for two days as part of a workshop to teach astronomy Python coding.