

Jenny Jianing Su

jennyjn.su@mail.utoronto.ca | <https://su-jenny.github.io/> | University of Toronto

EDUCATION

PhD in Astronomy and Astrophysics 2023 - Present

University of Toronto, Toronto, ON, Canada

- Supervisor: Prof. Maria Drout
- Thesis: *Tracing the Evolution and Explosion Properties of Stripped Envelope Supernova Progenitors*

BSc in Physics 2019 - 2023

McGill University, Montréal, QC, Canada

- Supervisors: Prof. Vicky Kaspi and Dr. Ryan Mckinven
- Thesis: *Comparison of Repeating and Non-Repeating Fast Radio Bursts Detected by CHIME/FRB*

AWARDS AND SCHOLARSHIPS

NSERC Postgraduate Scholarships – Doctoral (\$120,000) 2025 - 2028

Natural Sciences and Engineering Research Council of Canada (NSERC)

Queen Elizabeth II Graduate Scholarship in Science and Technology (\$15,000) 2024 - 2025

University of Toronto

Dunlap Student Training Grant (\$180) 2024

University of Toronto

Graduate Entrance Scholarship (\$3000) 2023

David A. Dunlap Department of Astronomy & Astrophysics

Undergraduate Student Research Award (\$6000) 2022

Natural Sciences and Engineering Research Council of Canada (NSERC)

NSERC Scholarship Supplements (\$1500) 2022

Fonds de recherche du Québec - Nature et Technologies

Science Tomlinson Engagement Award for Mentoring (\$600) 2021, 2022

McGill University, Montréal, QC, Canada

Arthur and Crystal Lau Entrance Scholarship in Science (\$3000) 2019

McGill University, Montréal, QC, Canada

UNDERGRADUATE RESEARCH EXPERIENCE

McGill University Jan 2022 – Aug 2023

Supervisors: Professor Victoria Kaspi and Dr. Ryan Mckinven

- Improved the Canadian Hydrogen Intensity Mapping Experiment Fast Radio Burst (CHIME/FRB) polarization pipeline and analyzed FRB polarization properties.

SUCCESSFUL OBSERVING PROGRAMS

Searching for the Survivor: Deep HST Imaging of the Explosion Site of SN2022jli 2025

PI, 12 orbits, Hubble Space Telescope Cycle 33

PUBLICATIONS

1. Zapartas, E. & Fox, O. D. & **Su, J.** et al. “The demographics of binary companions to stripped-envelope supernovae: confronting population synthesis models with observations”. *MNRAS*, 546, 2 (2026) doi: 10.1093/mnras/staf2208.
2. Williams, B. et al., “Hubble Space Telescope Deep Upper Limits Rule out a Surviving Massive Binary Companion to the Type Ic Supernova 2012fh.” *ApJ*, 993, 2 (2025), p. 159. doi: 10.3847/1538-4357/ae0335.
3. Pandhi A. et al. “Polarization Properties of 128 Nonrepeating Fast Radio Bursts from the First CHIME/FRB Baseband Catalog”. *ApJ*, 968, 2 (2024), p. 50. doi: 10.3847/1538-4357/ad40aa.
4. Faber, J. et al. “Morphologies of Bright Complex Fast Radio Bursts with CHIME/FRB Voltage Data”. *ApJ*, 974, 2 (2024), p. 274. doi:10.3847/1538-4357/ad59aa.
5. Mckinven, R. et al. “Revealing the Dynamic Magnetoionic Environments of Repeating Fast Radio Burst Sources through Multiyear Polarimetric Monitoring with CHIME/FRB”. *ApJ* 951, 1 (2023), p. 82. doi: 10.3847/1538-4357/acd188.
6. Mckinven R. et al. “A Large-scale Magneto-ionic Fluctuation in the Local Environment of Periodic Fast Radio Burst Source FRB 20180916B”. *ApJ*, 950, 1 (2023), p. 12. doi: 10.3847/1538-4357/acc65f.
7. The CHIME/FRB Collaboration et al. “CHIME/FRB Discovery of 25 Repeating Fast Radio Burst Sources”. *ApJ*, 947, 2 (2023), p. 83. doi: 10.3847/1538-4357/acc6c1.

TALKS

Department lunch talk, University of Toronto	2026
<i>Constraints on the Progenitor and any Surviving Companion of SESN SN2017gax</i>	
An Extraordinary Journey into the Transient Sky, Padova, Italy	2025
<i>Constraints on the Progenitor and any Surviving Companion of SESN SN2017gax</i>	
McGill Undergraduate Summer Research Showcase	2022
<i>Comparison of Repeating and Non-Repeating Fast Radio Bursts Detected by CHIME/FRB</i>	

POSTER PRESENTATIONS

Transients from Space, STScI, Baltimore, USA	2025
<i>Constraints on the Progenitor and any Surviving Companion of SESN SN2017gax</i>	
8th TESS/15th Kepler Asteroseismic Science Consortium Workshop, Porto, Portugal	2024
<i>Improved Period Estimates of RR Lyrae Stars using Multi-Tapering and the F-Test</i>	
McGill Undergraduate Poster Showcase	2023
<i>Comparison of Repeating and Non-Repeating Fast Radio Bursts Detected by CHIME/FRB</i>	

LEADERSHIP AND SERVICE

Graduate Astronomy Student Association (GASA) Co-President	2025 - 2026
<i>University of Toronto, Toronto, ON, Canada</i>	
Transients Journal Club Organizer	December 2024 - Present
<i>University of Toronto, Toronto, ON, Canada</i>	
Hogg Visitorship Planning Committee	2026
<i>University of Toronto, Toronto, ON, Canada</i>	
Martin Lecture Planning Committee	2024
<i>University of Toronto, Toronto, ON, Canada</i>	

SCIENCE OUTREACH

AstroTours Logistics Director <i>University of Toronto Graduate Astronomy Students Association, Toronto, ON, Canada</i>	Sep 2024 - Aug 2025
Keynote Speaker Executive <i>University of Toronto Graduate Astronomy Students Association, Toronto, ON, Canada</i>	Sep 2023 - Aug 2024
Coding for Cosmos Volunteer <i>University of Toronto, Toronto, ON, Canada</i>	July 2024
Volunteer for Astrophysics Outreach program <i>AstroMcGill, Montréal, QC, Canada</i>	Jan 2022 – May 2023
Educational Outreach Executive in Space Club <i>McGill Space Group, Montréal, QC, Canada</i>	Jan 2022 – Aug 2022
Director of Events for Virtual Reality Club <i>McGill AR/VR Association, Montréal, QC, Canada</i>	Sep 2021 – Apr 2022
Volunteer for Science Outreach Program <i>McGill University Let's Talk Science Outreach, Montréal, QC, Canada</i>	Jan 2020 – Aug 2021

TEACHING EXPERIENCE

Teaching Assistant: Life on Other Worlds <i>University of Toronto, Toronto, ON, Canada</i>	Jan 2026 - Apr 2026
Teaching Assistant: Stars and Planets <i>University of Toronto, Toronto, ON, Canada</i>	Sep 2025 - Dec 2025
Teaching Assistant: Life on Other Worlds <i>University of Toronto, Toronto, ON, Canada</i>	Jan 2025 - Apr 2025
Head Teaching Assistant: The Sun and its Neighbours <i>University of Toronto, Toronto, ON, Canada</i>	Sep 2024 - Dec 2024
Teaching Assistant: Stars and Galaxies. <i>University of Toronto, Toronto, ON, Canada</i>	Jan 2024 - Apr 2024
Teaching Assistant: The Sun and its Neighbours <i>University of Toronto, Toronto, ON, Canada</i>	Sep 2023 - Dec 2023
Physics Mentor <i>McGill University, Montréal, QC, Canada</i>	Sep 2022 – Dec 2022
Calculus Mentor <i>McGill University, Montréal, QC, Canada</i>	Jan 2021 – Apr 2021
Tutor at Literacy Organization <i>McGill University Frontier College, Montréal, QC, Canada</i>	Sep 2019 – Feb 2020