

Fletcher Waller

Position MSc student
Institution University of Victoria
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work experience

2022 **NTCO Intern**, - Gemini South, Chile
Supervisor: Dr. Steve Margheim
GHOST instrument commissioning and Data Reduction

2021-now **Graduate Research Assistant**, - University of Victoria, BC
Supervisors: Dr. Kim Venn and Dr. Alan McConnachie
Chemical abundances of metal-poor stars in Ultra-Faint Dwarf galaxies

2020 **Undergraduate Co-op Research Assistant**, - University of Victoria, BC
Supervisor: Dr. Kim Venn
Chemical abundances of metal-poor stars in the Milky Way galactic bulge

2019-2020 **Grocery Supervisor**, - Root Cellar Village Green Grocer, BC
Ran the grocery department of a locally-owned grocer

2018 **Undergraduate Co-op Research Assistant**, - NRC Herzberg, BC
Supervisor: Dr. Sam Lawler
n-body simulations of radiation pressure and planetary gravitational effects on dust disks

Publications

2022 **Waller, Fletcher;** et al.
The Cosmic Hunt for Members in the Outskirts of Ultra Faint Dwarf Galaxies: Ursa Major I, Coma Berenices, and Boötes I
MNRAS, arXiv:2208.07948.

2022 Sestito, Federico; et al.
The Pristine Inner Galaxy Survey (PIGS) V: a chemo-dynamical investigation of the early assembly of the Milky Way with the most metal-poor stars in the bulge I
MNRAS, arXiv:2208.13791.

2022 Hayes, Christian R.; **Waller, Fletcher;** et al.
The Gemini-South High-Resolution Optical Spectrograph (GHOST) data reduction system
SPIE, doi:10.1117/12.2642905.

2022 McConnachie, Alan W.; Hayes, Chris; Ireland, Michael; **Waller, Fletcher;** et al.
Science commissioning and first results from the next generation Gemini High Resolution Optical Spectrograph (GHOST)
SPIE, doi: 10.1117/12.2630407.

outreach

2020 & 2021 Volunteer Astronomy Open House, University of Victoria

education

- 2021-now** **MSc**, Astronomy - University of Victoria, BC
Advisor: Dr. Kim Venn
- 2016-2020** **BSc**, Physics and Astronomy, - University of Victoria, BC
- with 8 months of full-time research co-ops
- 2014-2016** **BMus**, Music Education & Performance (incomplete), - University of Victoria, BC

service

- 2022** **Mentor** Women in STEM Peer Mentorship Program
- 2022** **Founder** Physics and Astronomy Rainbow Society: Events and Community
- 2022** **Executive** Physics and Astronomy Graduate Student Association
- 2022** **Moderator** Queer Housing Victoria Facebook Group
- 2021** **Code of Conduct Writing** Undergraduate Physics and Astronomy Course Union, UVic
- 2021** **Online Seminar Technical Hosting** Stellar Seminars, UVic
- 2021** **LGBTQ+ Advocacy** for gender-neutral washrooms, Facilities Management, UVic
- 2020 & 2021** **Discord Moderator & Admin** Undergraduate Physics and Astronomy Course Union, UVic
- 2020** **Land-Acknowledgement Co-Writing** Undergraduate Physics and Astronomy Course Union, UVic
- 2017** **Music Day Camp Organizing** for middle-school students, UVic
- 2016 & 2017** **Student Council Member** Music Education Course Union, UVic

teaching experience

- 2021-2022** **Lab Instructor**, Physics and Astronomy Dept., University of Victoria
Phys 110, Astr 101
- 2018** **Tutoring**, Horizons
math & writing, ages 11-17
- 2015** **Private Music Lessons**, self-employed
tuba & musicianship
- 2012-2017** **Brass Musical Instrument Instructor**, middle- and elementary-schools
tuba, trombone, baritone

conferences and workshops

- 2022** SPIE 2022 - Montreal
Poster: The Gemini-south High-resolution Optical SpecTrograph (GHOST) data reduction system
Course: Introduction to Visible and NIR Spectrograph Design and Development for Astronomy
- 2022** CASCA 2022 - remote
Poster: New Members in the Outskirts of Ultra-Faint Dwarf Galaxies
- 2021** Dunlap Instrumentation Summer School - remote
- 2021** AAS 238 Summer Meeting - remote

2021	CASCA 2021 - remote Poster: GRACES Hi-Res Spectroscopic Chemical Abundances in Ultra-Faint Dwarf Galaxies
2020	CASCA 2020 - remote Poster: Gemini GRACES spectra of extremely metal-poor stars in the Galactic Bulge
2018	Astronomy NWxSW, UBC Talk: Dynamical Simulations of Fomalhaut's Dust Ring with CANFAR and REBOUND
2018	CASCA 2018 -Victoria, BC

honors and awards

- 2021-2022, Graduate Award, University of Victoria
- 2020, USRA, University of Victoria
- 2019, Miranda Ward Physics Award, University of Victoria
- 2016-2020, Odd Fellows Bursary, University of Victoria
- 2015, Mary M. Erich P. Schwandt Award, University of Victoria
- 2014, University of Victoria Entrance, University of Victoria

interests

- Astronomy-themed cross-stitch and crochet