

Olivier Gilbert

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Education

- BSc** **Université Laval**, Physics Sept 2022 – Present
- **CGPA:** 4.13/4.33
 - Concentration in astrophysics (required 4 specialized elective courses)
- DCS** **CEGEP de Lévis**, Natural Sciences Aug 2020 – May 2022
- **R-Score:** 32.901

Experience

- Bishop's University**, Research Assistant Sherbrooke, CA
Advisor: John J. Ruan May 2024 – Aug 2024
- Researched morphological link between host galaxies of Quasi-Periodic Eruptions and Tidal Disruption Events.
 - Extracted and analyzed images from wide-field surveys.
 - Calculated morphological parameters of galaxies from lenstronomy model fitting.
 - Used model comparison to determine optimal way to model host galaxies.
 - Performed statistical analysis to compare distributions of galaxies.
 - Wrote a paper as a first-author. (See the "Publications" section below)
- Bishop's University**, Research Assistant Sherbrooke, CA
Advisor: John J. Ruan May 2023 – Aug 2023
- Researched physics of accretion disks of low-brightness active galactic nuclei by studying changing-look quasars and their spectral energy distribution.
 - Analyzed images from the *Hubble Space Telescope* and the *Chandra X-ray Observatory*.
 - Reduced spectral data using IRAF.
 - Modeled quasars using Sérsic ellipse plus point source fitting with PSF convolution.
 - Produced paper-quality figures and tables.
 - Wrote a paper as a first-author. (See the "Publications" section below)
- Université Laval Foundation**, Programmer Québec, CA
2022
- Developed and programmed an online generosity calculator [🔗](#) to fit the income of the donors.

Publications

- Using Faded Changing-Look Quasars to Unveil the Spectral Energy Distribution Evolution of Low-Luminosity Active Galactic Nuclei** To be submitted to ApJ
- Gilbert, O.**, Ruan, J. J., Duffy, L., Eracleous, M., Anderson, S. F., Green, P. J., Haggard, D., Plotkin, R. M., Runnoe, J. C., Sobolewska, M.
- Draft version [🔗](#)
- A Host Galaxy Morphology Link Between Quasi-Periodic Eruptions and Tidal Disruption Events** Submitted to ApJ, Sep 2024
- Gilbert, O.**, Ruan, J. J., Eracleous, M., Haggard, D., Runnoe, J. C.

Scholarships

Undergraduate Student Research Award (USRA), National Sciences and Engineering Research Council of Canada (NSERC). \$6000 CAD

May 2024 - Aug 2024

Undergraduate Student Research Award (USRA), National Sciences and Engineering Research Council of Canada (NSERC). \$6000 CAD

May 2023 - Aug 2023

Presentations

American Astronomical Society (AAS) 245th Annual Meeting iPoster presentation on Quasi-Periodic Eruptions. NASA/ADS abstract [↗](#)

Jan 2025

Skills

Python: numpy, matplotlib, astropy, scipy, lenstronomy, pandas, etc.

Other languages: C++, JavaScript, HTML, CSS, C#

Other tools: LaTeX, SAO DS9, IRAF, HEASARC, CIAO

Leadership and Public Outreach

Presentation at Local Astronomy Club Invited presenter for the monthly meeting of a local astronomy club.

Sep 2024

Basketball: Captain of an Intramural Team at Université Laval

Sep 2023 - Present

Volleyball: Member of an Intramural Team at Université Laval

Sep 2022 - Present

Media Coverage

Astrobites Who's Home? A Supermassive Black Hole & its Tiny Friends [↗](#)

Dec 2024