

# Megan Cvitan

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## EDUCATION

### MCMMASTER UNIVERSITY

MSC. IN PHYSICS AND ASTRONOMY

Expected Dec. 2022 | Hamilton, ON

Supervisors: Dr. Lennarz and Dr. Chen

### MCGILL UNIVERSITY

BSc. IN PHYSICS,

MINOR IN COMPUTER SCIENCE

Graduated Dec. 2020 | Montreal, QC

### ST. ALOYSIUS GONZAGA

OSSD, FRENCH IMMERSION CERT.

Graduated 2016 | Mississauga, ON

## COURSEWORK

### GRADUATE

Nuclear Physics

Accelerator Physics

### UNDERGRADUATE

Electromagnetic Waves

Thermal and Statistical Physics

Algorithms and Data Structures

Computer and Software Systems

Experimental Methods

Computational Physics

Bayesian Statistics

Quantum Mechanics

Modern Physics

Classical Mechanics

## SKILLS

### PROGRAMMING

Proficient:

Python •  $\text{\LaTeX}$  • Java • C • Bash

Git • SPICE • KiCad • SolidWorks

Familiar:

HTML • OCaml • MATLAB • Arduino

### LANGUAGES

Native:

English • Croatian

Proficient:

French

### INTERESTS

Track and Field • Painting • Satellites and

Space Exploration • Chess • Nature and

Animals

## REFERENCES

### PROF. THOMAS BRUNNER

thomas.brunner@mcgill.ca

### PROF. CYNTHIA CHIANG

hsin.chiang@mcgill.ca

### PROF. DARYL HAGGARD

daryl.haggard@mcgill.ca

## RESEARCH

### MCGILL SPACE GROUP

JUNE 2020 - PRESENT | MONTREAL, QC

High Altitude Balloon Project, Mission Anseris I

### MCGILL UNIVERSITY

MAY 2019 - AUGUST 2019 | MONTREAL, QC

Characterizing VUV Light Sources for SiPM Testing with Prof. Thomas Brunner

JANUARY 2020 - APRIL 2020 | MONTREAL, QC

Development of a Soil Conductivity Meter for Antenna Signal Corrections in MIST with Prof. Cynthia Chiang

SEPTEMBER 2019 - DECEMBER 2019 | MONTREAL, QC

Calculating the Black Hole Mass of Blazar PKS 1502+106 from Different Epochs' Optical Spectra with Prof. Daryl Haggard

## WORK EXPERIENCE

### MCGILL UNIVERSITY

JULY 2020 - DECEMBER 2020 | MONTREAL, QC

Undergraduate Assistant Laboratory Technician

Redeveloped the PHYS 439/469 courses by making the experiments interactive and accessible for remote instruction.

### MCGILL SPACE GROUP

OCTOBER 2019 - PRESENT | MONTREAL, QC

Communications Subteam Leader

Selecting proper hardware and developing software for a prospective Low Earth Orbit

Earth-imaging 3U-CubeSat device that will compete in the Canadian Satellite Design

Challenge. Prepared and attended a Critical Design Review presentation in front of a panel of industry professionals

SEPTEMBER 2018 - OCTOBER 2019 | MONTREAL, QC

Communications Subteam Member

Designed the antenna whilst utilizing efficient, low-power transceivers in consideration of the satellite link budget.

### MCGILL SOCIETY OF PHYSICS STUDENTS

MAY 2019 - MAY 2020 | MONTREAL, QC

Vice President of Events

Represented undergraduate physics students as a whole to external organizations including the McGill administration, the Science Undergraduate Society, other McGill departments, and other universities.

### HALTON HEALTHCARE

JANUARY 2016 - SEPTEMBER 2016 | OAKVILLE, ON

Oakville Trafalgar Memorial Hospital Volunteer

AUGUST 2014 - JANUARY 2016 | GEORGETOWN, ON

Georgetown Hospital Medical/Surgical Unit Volunteer

## HONOURS AND AWARDS

Academic All-Canadian Award 2019-2020

Women in Physics Canada Conference 2018 Travel Award

Ontario Scholar 2016

Junior Leadership Award 2016

## INVOLVEMENTS

2016-2020 McGill Varsity Track and Field

2018-2019 McGill STEM Support Committee • 50+ hours

2018-2019 McGill Physics Makerspace Founding Member

2014-2016 Region of Peel Family Literacy Facilitator • 200+ hours

2014-2016 Prefect of Student Voice and Communications • 100+ hours of service