

# Parker Levesque

Department of Astronomy & Astrophysics

University of Toronto

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Website: TBA

## EDUCATION

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UNIVERSITY OF TORONTO 2019 - 2023

*HBSc, Department of Astronomy & Astrophysics, Specialist in Astrophysics and Minor in Mathematics*

Sessional GPA: 4.0/4.0

THESIS: *Calibrating MAPS's Adaptive Optics System*

SUPERVISOR: Prof. Suresh Sivanandam

## RESEARCH EXPERIENCE

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### *Calibrating MAPS's Adaptive Optics System*

University of Toronto Current

*Supervisor:* Dr. Suresh Sivanandam

Simulating a closed-loop adaptive optics system as a means to calibrate the MMT's recently installed adaptive secondary mirror. Newly developed algorithms make use of empirical data and simulated data to calibrate the mirror.

### *Dragonfly Telephoto Array*

University of Toronto, SURP 2022

*Supervisor:* Dr. Roberto Abraham

Utilizing the image stabilization capabilities within each of the lenses of the Dragonfly telescope to allow for longer exposures, as well as creating infrastructure for reducing and visualizing data in order to assess the performance of the instrument.

## AWARDS AND FELLOWSHIPS

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### **Aurora Borealis Fellowship**

University of Toronto, DADDAA 2022

As part of the 2022 Summer Undergraduate Research Program.

### **Dean's List Scholar**

University of Toronto 2019 - 2022

For having a high qualifying GPA.

### **OSOTF Award**

Innis College, University of Toronto 2021 AND 2022

For outstanding academic performance and financial need.

### **Innis College Exceptional Achievement Award**

Innis College, University of Toronto Nov. 2020

For outstanding academic performance.

## CONFERENCE TALKS

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**NSBP annual conference (invited)** 2023

*Data Organization for High Complexity Instruments*

**CASCA annual conference (invited)** 2023

*Upgrading MAPS's Adaptive Optics System*

## CONFERENCE POSTERS

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**Levesque, P.** (2022). *Data Reduction and Visualization for the Dragonfly Telephoto Array. SUPR final poster presentations.*

## OUTREACH

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**AstroTours** 2022

Volunteer at University of Toronto's monthly AstroTours. Duties include setting up spaces for the event, guiding guests to each location on campus, verifying tickets and answering astronomy related questions.

## TEACHING EXPERIENCE

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**Math and Physics Tutor** 2020 - Present

Give one-on-one lessons, specific to each student's needs.  
Create practice questions and review previous assignments.  
Answer questions via E-mail.

## GRANTS AND BURSARIES

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*UTAPS Grant* 2021  
University of Toronto

## MEDIA APPEARANCES

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**Math & Physics Podcast** 2020 - Present

Co-host of over one hundred episodes, covering all topics in the math and physics world.  
Amassed over 50,000 followers and 650,000 downloads.  
Spoken to dozens of researchers and professors about their careers and current work.