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## Mr. Kaleb Ruscitti

Correspondence language: English

Date of Birth: 12/15

Canadian Residency Status: Canadian Citizen

Country of Citizenship: Canada

## Contact Information

The primary information is denoted by (\*)

### Address

#### Mailing (\*)

115 Country Lane  
Barrie Ontario L4N0N2  
Canada

#### Temporary

2202 Boulevard Rosemont  
Unit 5  
Montreal Quebec H2G1T5  
Canada  
2021/09/01 - 2022/06/30

### Telephone

#### Mobile (\*)

705-3099847

### Email

#### Personal (\*)

kaleb@ruscitti.ca

#### Work

kaleb.ruscitti@mail.mcgill.ca



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## Mr. Kaleb Ruscitti

### Language Skills

| Language | Read | Write | Speak | Understand |
|----------|------|-------|-------|------------|
| English  | Yes  | Yes   | Yes   | Yes        |
| French   | Yes  | Yes   | Yes   | Yes        |

### User Profile

Research Disciplines: Pure Mathematics, Physics

Areas of Research: Geometry, Quantum Phenomena

Fields of Application: Foundations and Knowledge Acquisition

Research Specialization Keywords: Geometry, Moduli Spaces, Quantum Field Theory

### Degrees

|                 |                                                                                                                                     |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 2021/9          | Master's Thesis, Masters of Science, Mathematics, McGill University<br>Degree Status: In Progress<br>Supervisors: Jacques Hurtubise |
| 2016/9 - 2021/5 | Bachelor's Honours, Bachelor's of Science, Mathematical Physics, University of Waterloo<br>Degree Status: Completed                 |

### Employment

|                 |                                                                                                                                         |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 2021/7          | Document Editor<br>Wordvice                                                                                                             |
| 2020/5 - 2020/8 | Undergraduate Research Assistant<br>Pure Mathematics, University of Waterloo                                                            |
| 2019/5 - 2019/8 | Undergraduate Research Assistant<br>Energy, Materials, Telecommunications, Varennes, QC, Institut national de la recherche scientifique |
| 2019/1 - 2019/4 | Undergraduate Research Assistant<br>Institute for Quantum Computing, University of Waterloo                                             |
| 2018/1 - 2018/4 | Undergraduate Research Assistant<br>Institute for Quantum Computing, University of Waterloo                                             |

## Research Funding History

### Completed [n=3]

|                                    |                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2020/4 - 2020/8<br>Co-investigator | <p>NSERC Undergraduate Student Research Award</p> <p>Principal Investigator : Ruxandra Moraru</p> <p><b>Funding Sources:</b></p> <p>2020/4 - 2020/8      Natural Sciences and Engineering Research Council of Canada (NSERC)</p> <p>Undergraduate Student Research Award</p> <p>Total Funding - 6,000 (Canadian dollar)</p> <p>Funding Competitive?: Yes</p>    |
| 2019/5 - 2019/8<br>Co-investigator | <p>NSERC Undergraduate Student Research Award</p> <p>Principal Investigator : Roberto Morandotti</p> <p><b>Funding Sources:</b></p> <p>2019/5 - 2019/8      Natural Sciences and Engineering Research Council of Canada (NSERC)</p> <p>Undergraduate Student Research Award</p> <p>Total Funding - 6,000 (Canadian dollar)</p> <p>Funding Competitive?: Yes</p> |
| 2019/1 - 2019/4<br>Co-investigator | <p>NSERC Undergraduate Student Research Award</p> <p>Principal Investigator : Raffi Budakian</p> <p><b>Funding Sources:</b></p> <p>2019/1 - 2019/4      Natural Sciences and Engineering Research Council of Canada (NSERC)</p> <p>Undergraduate Student Research Award</p> <p>Total Funding - 6,000 (Canadian dollar)</p> <p>Funding Competitive?: Yes</p>     |

## Mentoring Activities

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2022/1 - 2022/4 | <p>Graduate Student Mentor, McGill Graduate Student Association for Mathematics and Statistics</p> <p>Number of Mentorees: 1</p> <p>In partnership with the McGill Society of Undergraduate Mathematics Students, the Graduate Association runs a Directed Reading Program. I am registered in this program to mentor an undergraduate student to do a directed study of a theorem, topic or paper of our choosing.</p> |
| 2018/9 - 2019/4 | <p>Undergrad Student Mentor, University of Waterloo Physics Club</p> <p>Number of Mentorees: 1</p> <p>I was a mentor in a program which matched upper year physics majors with first year incoming students, to provide 1-on-1 mentoring. I helped my mentoree with the transition to university both in academics and managing life outside the classroom.</p>                                                         |

## Community and Volunteer Activities

2017/4 - 2018/9      Communications Executive, University of Waterloo Ballroom Dance Club  
The Ballroom Dance Club was an extracurricular club for students to learn ballroom dancing. I was on the executive team which organized the dance classes, practices and social events. As the communications executive, I made and distributed advertisements for the club, and I also managed email and social media to keep the membership informed of events and information related to the club.

## Presentations

1. (2018). Adaptive Optics for Ion-Addressing in an Ion Trap Quantum Simulator. Physics Undergraduate Conference (PhUnC), London, ON, Canada  
Main Audience: Researcher  
Invited?: No, Keynote?: No, Competitive?: Yes

## Publications

### Thesis/Dissertation

1. Time evolution of coHiggs bundles given by Lax pairs. (2020). University of Waterloo. Bachelor's Honours.  
Number of Pages: 19 Supervisor: Ruxandra Moraru  
Funding Sources: Natural Sciences and Engineering Research Council of Canada (NSERC)