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## ACADEMIC BACKGROUND

### University of Victoria

Ph.D. Student | 2019 - present

Physics and Astronomy | Supervisor: Prof. Arif Babul | GPA: 8.0/9.0

### Alzahra University

M.Sc. | 2015 - 2018

Astrophysics | Supervisor: Prof. Taghi Mirtorabi | GPA: 4.0/4.0

Completed the MSc dissertation on: "Study on the fully dynamical and aspherical solutions in modified gravity theories displaying the Vainshtein screening mechanism"

### Iran University of Science and Technology (IUST)

B.Sc. | 2010 - 2014

Physics | GPA: 3.2/4.0

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## RESEACH EXPERIENCE

### Research Assistant

*University of Victoria | 2019 - present*

Investigating the occurrences of bound supermassive black hole systems, the impact of the supermassive black holes on the circumgalactic medium (CGM), and the origin of multiphase structure in the CGM using the Romulus simulations

### Research Assistant

*Shahid Beheshti University | 2018 - 2019*

Studied on dynamics of a scalar field which evolve from light-dark matter-like behavior to a combination of heavy dark matter-like and dark energy-like behavior

### Research Assistant

*Alzahra University | 2017 - 2018*

Studied on the fully dynamical and aspherical solutions in modified gravity theories displaying the Vainshtein screening mechanism

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## WORK EXPERIENCE

### Student Mentor

*University of Victoria | 2021 - present*

*Mentored two students*

### Communications Officer

*Astronomy Research Centre, University of Victoria | 2021 - present*

### Lab Instructor

*University of Victoria | 2019 - 2021*

*ASTRO-101, ASTRO-102*

### Teaching Assistant

*2013 - 2021*

*University of Victoria (Student Seminar), Alzahra University (Introduction to Cosmology), IUST (General Physics)*

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## LEADERSHIP EXPERIENCE

### Member

*N-Body Shop code of conduct | University of Victoria | 2021 - 2023*

### Academic Mentor

*Physics Dept Mentorship Program | University of Victoria | 2020 - present*

### Academic Representative

*PAGSA | University of Victoria | 2020 - 2022*

### Event Organizer and Chair

*Astronomy Seminar Series | University of Victoria | 2020 - present*

### Organizer

*International Orientation Day | University of Victoria | 2020*

### Board of Directors Member

*Students Scientific Association, School of Physics | IUST | 2010 - 2013*

### Execution Team Member

*Star Observation Tours | Loot Sky Astronomy Centre | 2010 - 2012*

### Co-Founder

*Astronomy Scientific Association | RCIEE | 2010 - 2012*

# AWARDS

- Canadian Space Agency Award to attend and present at CASCA 2023 | 2023
  - University of Victoria | Faculty of Graduate Student Award | 2023
  - Canadian Space Agency Award to attend and present at COSPAR 2022 in Athens, Greece | 2022
  - SciNet HPC | Fully Scholarship to Attend IHPC Summer School in Athens, Greece |2022
  - University of Victoria | Criswick Award | 2022
  - University of Victoria | Graduate award | 2020
  - University of Victoria | Graduate fellowship | 2019
  - Alzahra University | Graduate merit award |2015 - 2017
  - IUST | Undergraduate merit award | 2010 - 2014
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## PUBLICATIONS

### Peer-Reviewed Journal Articles:

- S Lyla Jung, Douglas Rennehan, **Vida Saeedzadeh**, Arif Babul, Michael Tremmel, Thomas R Quinn, S Ilani Loubser, E O'Sullivan, Sukyoung K Yi, Massive central galaxies of galaxy groups in the ROMULUS simulations: an overview of galaxy properties at  $z = 0$ , Monthly Notices of the Royal Astronomical Society, Volume 515, Issue 1, September 2022, Pages 22–47 (IF: 5.7)
- **Vida Saeedzadeh**, S. Lyla Jung, Douglas Rennehan, Arif Babul, Michael Tremmel, Thomas R. Quinn, Zhiwei Shao, Prateek Sharma, Lucio Mayer, E. O'Sullivan, S. Ilani Loubser, 2023, Cool and gusty, with a chance of rain: Dynamics of multiphase CGM around massive galaxies in the Romulus simulations [[Accepted for publication at MNRAS](#)]

### In Preparation Journal Articles:

- **Vida Saeedzadeh**, Douglas Rennehan, Arif Babul, Michael Tremmel, Thomas R. Quinn, 2023. Dual AGNs: Detecting bright AGN pairs onto the path to binary black holes and black hole mergers [In Prep]
  - **Vida Saeedzadeh**, Suvodip Mukherjee, Arif Babul, Michael Tremmel, Thomas R. Quinn, 2023. Supermassive binary blackhole and galaxy connection: Where do we expect the gravitational wave sources detectable from Pulsar Timing Array to reside? [In Prep]
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## INVITED TALKS

- *Max Planck Institute for Astronomy, 2023*  
Cool and gusty, with a chance of rain: Dynamics of multiphase CGM around massive galaxies in the Romulus simulations
  - *Center for Computational Astrophysics - Flatiron Institute, 2023*  
Multiphase structure of CGM in Romulus simulations
  - *University of Wroclaw, 2022*  
Dual AGNs: Detecting bright AGN pairs onto the path to binary black holes and black hole mergers
  - *Institute of Computational Science, University of Zurich, 2022*  
Dual AGNs: Detecting bright AGN pairs onto the path to binary black holes and black hole mergers
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## PRESENTATIONS

- *Canadian Astronomical Society AGM, 2023*  
Multiphase CGM around massive galaxies
- *44th Assembly of Committee on Space Research COSPAR, 2022*  
Dual AGNs: Detecting bright AGN pairs onto the path to binary black holes and black hole mergers
- *International High-Performance Computing Summer School, 2022*  
Studying galaxies' circumgalactic medium by developing hyper refinement model using HPC
- *51st annual meeting of the Canadian Astronomical Society, 2021*  
Dual AGNs: Detecting bright AGN pairs onto the path to binary black holes and black hole mergers
- *British Columbia's Cosmology Meeting, 2021*  
Dual AGNs
- *Kavil Institute for Astronomy and Astrophysics Conference on Gas in Galaxies 2021*  
Resolving cold circumgalactic medium gas in Romulus simulations
- *50th annual meeting of the Canadian Astronomical Society, 2021*  
Resolving cold circumgalactic medium gas in Romulus simulations
- *British Columbia's Cosmology Meeting, 2020*  
The origin of the multiphase structure in the intracluster medium
- *Alzahra University Cosmology Forum, 2016*  
Experimental tests of general relativity