

# BORIS ZUPANCIC

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<https://boriszupancic.github.io/>

EDUCATION	<b>McGill University</b> <i>Ph.D. in Mathematics</i> • Cumulative GPA: 4.00/4.00	Montréal, QC 2024 - 2028 ( <i>expected</i> )
	<b>Queen's University</b> <i>M.Sc. in Mathematics</i> • Cumulative GPA: 4.12/4.30	Kingston, ON 2023 - 2024
	<b>Queen's University</b> <i>B.Sc. Honours in Mathematical Physics</i> • Cumulative GPA: 4.14/4.30	Kingston, ON 2019 - 2023
RESEARCH EXPERIENCE	<b>Doctoral Research Thesis</b>   McGill University <i>In Poisson Geometry, Singularity Theory, Mathematical Physics.</i> • Topic/Title: <i>Resolution of Singularities in Poisson Geometry</i> • Advisor: Prof. Brent Pym	2024.09 - <i>Present</i>
	<b>Master's Research Project</b>   Queen's University <i>In Riemannian and Hyperbolic Geometry, Dynamics.</i> • Topic/Title: <i>Marked Length Spectrum Rigidity of Surfaces</i> • Advisor: Prof. Thomas Barthelmé	2023.09 - 2024.08
	<b>Bachelor's Research Thesis</b>   Queen's University <i>In Computational Astrophysics, Galactic Dynamics.</i> • Topic/Title: <i>Fuzzy Dark Matter Dynamics and the Quasi-Particle Hypothesis</i> • Advisor: Prof. Larry Widrow	2022.05 - 2023.08
TEACHING EXPERIENCE	<b>Graduate Teaching Assistant</b>   McGill and Queen's Universities <i>Teaching tutorials and grading assignments/exams.</i> • McGill: Advanced Calculus, Linear Algebra and Geometry, Differential Calculus. • Queen's: Ordinary Differential Equations, Calculus, Advanced Calculus.	2023.09 - <i>Present</i>
	<b>John Ursell Tutor</b>   Queen's University <i>Undergraduate teaching assistantship.</i> • Weekly tutoring sessions at the Math Help Center, in Calculus and Linear algebra.	2022.09 - 2023.04
	<b>Research and Outreach Fellow</b>   Arthur B. McDonald Institute <i>Research project and outreach at a science summer camp.</i> • Early start on undergraduate research thesis. • Worked in a team of 6 Fellows to collaborate on creating and structuring the Summer of Science camp. • Prepared and presented educational content in mathematics and physics for a small cohort of advanced junior and senior high-school students.	2022.05 - 2022.08

PUBLICATIONS	1. Boris Zupancic and Lawrence M Widrow. “Fuzzy dark matter dynamics and the quasi-particle hypothesis”. In: <i>Monthly Notices of the Royal Astronomical Society</i> 527.3 (Nov. 2023), pp. 6189–6197. ISSN: 0035-8711. DOI: 10.1093/mnras/stad3620. eprint: <a href="https://academic.oup.com/mnras/article-pdf/527/3/6189/54022942/stad3620.pdf">https://academic.oup.com/mnras/article-pdf/527/3/6189/54022942/stad3620.pdf</a> . URL: <a href="https://doi.org/10.1093/mnras/stad3620">https://doi.org/10.1093/mnras/stad3620</a>	
	2. Boris Zupancic et al. “A Hydrodynamic Quantum Analogue — Walking Droplets”. In: <i>Journal of Undergraduate Engineering Physics and Physics Experiments at Queen’s</i> (Vol 3. (2022)). URL: <a href="https://ojs.library.queensu.ca/index.php/JUEPPEQ/article/view/15686">https://ojs.library.queensu.ca/index.php/JUEPPEQ/article/view/15686</a>	
AWARDS AND HONORS	• Richard H. Tomlinson Doctoral Fellowship, McGill University	2024 - 2027
	• N. and G. Miller Graduate Fellowship, Queen’s University	2023
	• Dean’s Honour List, Queen’s University	2020 - 2023
	• Queen’s University Excellence Scholarship, Queen’s University	2019
SKILLS	<b>Languages:</b> English, French, Serbian.	
	<b>Programming and Scripting:</b> Python, C, Julia, Bash.	