

# Jakob Sloan

<b>Contact Information</b>	School of Mathematics and Statistics The University of Melbourne Parkville, VIC, 3000, Australia	<b>Email</b> <b>Phone</b> <b>Webpage</b>	jakes2002@gmail.com +61 410 196 869 <a href="https://github.com/pushkinzi">pushkinzi.github.io</a>
<b>Education</b>	<b>2023-2024: University of Melbourne</b> MSc. in Mathematics; supervisor <a href="#">A\Prof. Nora Ganter</a> . Thesis: <i>Introductory <math>\mathcal{D}</math>-modules, field theory and vertex algebras.</i> <b>2020-2022: University of Melbourne</b> BSc. in Mathematics		
<b>Scholarships &amp; Prizes</b>	2023-2024: Academic Excellence Scholarship (Awarded $\times 4$ by Department of Mathematics and Statistics) 2022: Vacation Research Scholarship (Awarded by the University of Melbourne)		
<b>Research Projects</b>	2023-2024: Master's Thesis ' <i>Introductory <math>\mathcal{D}</math>-modules, field theory and vertex algebras.</i> ' Under <a href="#">A\Prof. Nora Ganter</a> . 2022: Undergraduate research project ' <i>On de Sitter and anti-de Sitter spacetimes.</i> ' Under <a href="#">Dr. Volker Schlue</a> .		
<b>Conference Talks &amp; Seminars</b>	Nov-2024: Student invitational speaker at <a href="#">MATRIX</a> Conference topic: <a href="#">Tensor Categories, Quantum Symmetries, and Mathematical Physics</a> . Talk: <i>Pseudo-tensor categories, chiral algebras and vertex algebras.</i> Nov-2024: Co-Organiser of Gromov-Witten-theory reading group (with <a href="#">A. Ram</a> & <a href="#">G. Zhao</a> ) Talk: <i>Enumerations in <math>GW</math>-theory &amp; quantum cohomology.</i> Aug-2024: Pre-MATRIX tensor categories talks (under <a href="#">D. Ridout</a> ) Talk: <i>Braided tensor categories and the cobordism categories.</i> May-2024: Co-organiser for K3-surfaces reading group Talks: <i>The global Torelli theorem for K3 surfaces.</i> <i>The local Torelli theorem for K3 surfaces.</i> Feb-2024: Student Pure Math Seminars (under <a href="#">N. Ganter</a> ) Talks: <i>Elliptic curves as Riemann surfaces and as groups.</i> <i>Error correcting codes and projective geometry.</i> Mar-2023: Gauge theory reading groups (under <a href="#">T. Quella</a> & <a href="#">J. Knapp</a> ) Talk: <i>Topological phases in gauge theory.</i>		
<b>Teaching Experience</b>	<b>University of Melbourne</b> Linear algebra (2023-Ongoing) Calculus II (2023) <b>Institute for Enquiring Minds</b> Volunteer math tutoring (2024-Ongoing)		
<b>Referees</b>	<a href="#">A\Prof. Nora Ganter</a> nganter@unimelb.edu.au	<a href="#">A\Prof. Diarmuid Crowley</a> dcrowley@unimelb.edu.au	<a href="#">Dr. Gufang Zhao</a> gufangz@unimelb.edu.au
<b>Languages</b>	English (Mother Tongue)	French	Russian