

JACQUES GIDEON VAN WYK

Ph.D. Student
University of Waterloo
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EDUCATION

University of Waterloo *September 2023 – Present*
Working to complete a Ph.D. in Pure Mathematics.

University of Waterloo *September 2022 – August 2023*
Completed a M.Sc. in Pure Mathematics.

Simon Fraser University, Burnaby *September 2017 – June 2022*
Completed a B.Sc. in Honours Mathematics with concentration in Analysis and Optimisation and in Algebra and Number Theory.

WORK EXPERIENCE

Undergraduate Mathematics Research *June 2021 – December 2021*
Studying an inverse problem for a particular kind of kinetic equation PDE with applications in measuring blood oxygen saturation. Partially funded by NSERC Undergraduate Research Award.

AWARDS & SCHOLARSHIPS

NSERC Undergraduate Student Research Award *Summer 2021*
Awarded by the Natural Science and Engineering Council of Canada (NSERC) to undergraduate students doing research work experience.

SFU Open Scholarship *Spring 2019 – Spring 2021*
Scholarship awarded by Simon Fraser University (SFU) to academically highly-qualified students on a term-by-term basis.

SFU President's & Dean's Honour Roll *Fall & Spring 2019, Spring 2020 – Spring 2021*
Awarded by Simon Fraser University on the basis of excellent work completed in the previous study term.

FUSION Award *Summer 2021*
Awarded by the Future Skills Innovation Network (FUSION) for completion of their Skill Development Programme.

SEMINARS & COLLOQUIA

UWaterloo Differential Geometry Working Seminars *September 2022 – Present*
Attending regular seminars organised by the differential geometry group at the University of Waterloo. I speak regularly on topics relating to my research.

UWaterloo Pure Mathematics Colloquium*September 2022 – Present*

Attending regular colloquia organised by the Department of Pure Mathematics at the University of Waterloo. Speakers include a wide variety of mathematicians from diverse fields.

SFU NTAG Seminars*March 2021 – June 2022*

Attended regular seminars organised by the Simon Fraser University Number Theory and Algebraic Geometry group.

SFU Working Applied Mathematics Seminar*October 2021 – June 2022*

Attended weekly seminars hosted by the Simon Fraser University Applied Mathematics group. Presented undergraduate research project on November 24, 2021.

PIMS-SFU Applied and Computational Math Seminars*October 2021 – June 2022*

Attended regular seminars hosted by the Pacific Institute for Mathematics at Simon Fraser University.

PRESENTATIONS**SFU NSERC USRA Presentations***August 11, 2021*

Presented undergraduate research project to fellow undergraduate NSERC USRA recipients.

SFU Working Applied Mathematics Seminar*November 24, 2021*

Presented undergraduate research project at the SFU Working Applied Mathematics Seminar.

OTHER EXPERIENCE**Algebraic Topology for Amateurs Workshop***March 24, 2021*

A workshop hosted by the Algebraic and Complex Geometry group (Arbeitsgruppe algebraische und komplexe Geometrie) at the University of Marburg.

FUSION Skill Development Programme*Summer 2021*

A single-semester course designed to develop collaboration skills, communication skills, and to think critically and creatively. The programme consists of a self-directed 10-hour online interactive learning experience intended to build on experiential education experience.

TECHNICAL SKILLS**Software & Programming**

Proficient in $\text{\LaTeX}$, Swift and Objective-C, intermediate knowledge of Maple, MATLAB, Mathematica, Lean and C, basic of knowledge C++ and Python.