Jonah Saks CV, 2023

jonah.saks@mail.mcgill.ca +1 (514) 746 2247

Education:

Master of Science - Mathematics and Statistics (thesis)
McGill University - Supervisor: Professor Mikaël Pichot

May 2023

Bachelor of Science - Honours Mathematics

McGill University - with First Class Honours

January 2022

Awards & distinctions:

NSERC - Canada Graduate Scholarships - Master's award January 2022

Title: Extending group actions on trees Supervisor: Professor Mikaël Pichot

Outstanding Teaching Assistant Award, McGill Fall 2022

Algebra 1

NSERC - Undergraduate Student Research Award Summer 2020

Title: Extensions of geometric group actions

Supervisor: Professor Mikaël Pichot

FRQNT - Suppléments à la bourse BPC du CRSNG Summer 2020

Papers:

On the homology of several number-theoretic set families, with Marcel K. Goh. Enumerative Combinatorics and Applications 4(2), (2024), 11 pp. [pdf]

Exposing the almost-stability theorem, MSc thesis, (2023), [eScholarship@McGill]

The lattice of arithmetic progressions, with Marcel K. Goh and Jad Hamdan. Australasion Journal of Combinatorics 84(3), (2022), 357-374. [pdf]

Research interests:

Geometric group theory, measured group theory, combinatorics

Conferences & seminars attended:

Thematic program in Geometric Group Theory	January - July 2023
Canadian Mathematical Society - Summer Meeting	July 2022
McGill Geometric Group Theory Seminar	Winter 2022
Geometric group theory without boundaries II	June 2021
Geometric group theory without boundaries	July 2020
Canadian Undergraduate Mathematics Conference	August 2018

Jonah Saks

Graduate coursework:

Cube Complexes, Daniel Wise	2023
Algebraic Topology, Piotr Przytycki	2023
Measured Group Theory, Mikaël Pichot	2022
Lie Groups & Representations, Joel Kamnitzer	2022
Geometric Group Theory, Daniel Wise	2022
Ergodic Theory and Groups, Anush Tserunyan	2022
Geometry & Topology 1, Daniel Wise	2021
Intro to Functional Analysis, Gantumur Tsogtgerel	2021
Higher Algebra 2, Patrick Allen	2021
Higher Algebra 1, Mikaël Pichot	2020

Tutoring & mentoring:

Teaching assistant, Discrete Structures, McGill	Winter 2023
Teaching assistant, Algebra 1, McGill	Fall 2022
McGill directed reading program, Bass-Serre theory	Winter 2022
Math tutor in Dawson College SHS program	Fall 2022
McGill Math Help Desk	Winter 2020
Math tutor for high-school and Cégep students	2017-2021

Reports & projects:

McGill directed reading program, report	January 2020
Title: Expository paper on the fundamental group	
Undergraduate research project	Summer 2019
Title: The Chebyshev-Sylvester approach to the prime number distribution	

Supervisor: Professor Gantumur Tsogtgerel

Miscellaneous:

Vice-President of Social Affairs, SUMS McGill	2021
Vice-President of Communications, SUMS McGill	2020