

Danny Ofek

University of British Columbia
Department of Mathematics
Vancouver, BC V6T1Z4

Email: dannyofek@gmail.com
Homepage: <https://personal.math.ubc.ca/~dannyofe/>

Education

Ph.D. in Mathematics, University of British Columbia, 2023 - present.

M.Sc. in Mathematics, University of British Columbia, 2021 - 2023.

B.Sc. in Mathematics, Tel-Aviv University (graduated summa cum laude, 99/100), 2018 - 2021.

Publications

- [1] Lower bounds on the essential dimension of reductive groups. arxiv:2411.03789. Posted November 2024. Accepted for publication at Annales scientifiques de l'École normale supérieure.
- [2] Essential dimension of cohomology classes via valuation theory, joint with Zinovy Reichstein, to appear in Israel Journal of Mathematics, arXiv:2401.0853. Posted January 2024.
- [3] Reduction of Structure to Parabolic Subgroups, Documenta Mathematica, 2022.
- [4] Distance between reproducing kernel Hilbert spaces and geometry of finite sets in the unit ball, joint with Satish K. Pandey and Orr Moshe Shalit, Journal of Mathematical Analysis and Applications, 2021.
- [5] Three classification results in the theory of weighted Hardy spaces on the unit ball, joint with Gilad Sofer, Complex Analysis and Operator Theory, 2021.

Awards and honors

NSERC three year post graduate scholarship (PGS-D), May 2025- present.

Four Year Doctoral Fellowship (4YF), UBC Graduate Studies, 2023 - present .

Tel-aviv University academic excellence scholarship, 2020-2021.

Young Weizmann scholars fellowship, yearly undergraduate research experience program, 2021.

Rector's honor list, Tel-aviv University, 2021.

Dean's honor list, Tel-aviv University, 2019-2020.

Invited talks

A valuation theoretic characterization of special groups, Conference at BIRS, Arithmetic Geometry and Algebraic Groups, October 2025.

Lower bounds on the essential dimension of reductive groups, Algebra and Algebraic Geometry Seminar at University of Washington, February 2025.

Springer's decomposition theorem for torsors and essential dimension, Workshop on Galois Cohomology and Massey products at uOttawa, June 2024.

Springer's decomposition theorem for torsors of semisimple groups, University of Alberta, April 2024.

Essential dimension of Brauer and Witt classes via valuation theory, Conference at BIRS, Motives and Invariants: Theory and Applications to Algebraic Groups and their Torsors, October 2023.

On the essential dimension of cycle modules, CMS Summer Meeting, June 2023.

Reduction of Structure to Parabolic Subgroups, Quadratic forms, Linear algebraic groups and Beyond online seminar, July 2022.

Employment

Small class instructor for first year calculus course (MATH 180), University of British Columbia, September-December 2025.

Teacher assistant, University of British Columbia, 2021 - 2025.

Teacher assistant, Tel-Aviv University, 2020.