

Nikolas A. Rieke Email: nikolasrieke@gmail.com

EDUCATION

M.Sc - Mathematics University of Western Ontario London, ON, 2023 - 2024

B.S. - Mathematics University of Kentucky Lexington, 2019 - 2023

PUBLICATIONS

M. Campisi, N. Cazet, D. Crncevic, T. Fellman, P. Kessler, N. Rieke, V. Srivastava, L. Torres
Vertex distortion detects the unknot, J. Knot Theory and Its Rammifications, **Vol. 31**, (2022)

OTHER RESEARCH EXPERIENCES

Ehrhart functions for phylogenetics and conformal blocks (*With Christopher Manon, Nathan Jones, Ale Lozano*)

AWARDS

Funding for University of Kentucky summer research program \$ 2500

Carolyn S. Bunyan Scholarship \$ 2500 Award given to one outstanding student in mathematics at University of Kentucky every year

Patterson Scholarship *Full tuition and housing stipend* awarded to highly qualified applicants to the undergraduate program at the University of Kentucky

PRESENTATIONS AND TALKS

Erhart Functions for Phylogenetics and Conformal Blocks Georgetown College, KYMAA Annual Meeting, March 31 2023

An introduction to Homotopy Type Theory University of Western Ontario, Algebraic Topology - Homotopy Theory Graduate Seminar , October 27 2023

Affine Varieties and Non-Linear Algebra University of Western Ontario, Working Algebraic Geometry Seminar , Feb 6 2024

Erhart Theory of Lattice Polytopes University of Western Ontario, Algebraic Topology - Homotopy Theory Graduate Seminar , February 14 2024

Affine Toric Varieties and Convex Geometry University of Western Ontario, Toric Learning Seminar , May 22 2024

LANGUAGES

English -*Fluent*

Spanish -*Fluent*

Mandarin -*Conversational*

SERVICE

Graduate Teaching Assistant University of Western Ontario 2023-2024

Organizer: Toric Learning Seminar University of Western Ontario 2023-2024

Math Club President University of Kentucky 2022-2023

Eagle Scout Troop 614 Scotts Valley, CA

PROGRAMMING LANGUAGES

C++, Python, Wolfram Mathematica, Matlab, Macaulay2, Julia

WORK EXPERIENCE

Martial Arts instructor Elite Martial Arts, Scotts Valley Ca. 2014-2017

Intern Thomas Immigration Law, Santa Cruz Ca. 2017-2018

Intern Kaplan IP Law, Santa Cruz Ca. 2018-2019

Sushi Cook Shogun Japanese Restaraunt, Santa Cruz Ca. 2015-2016