

NORTHFIELD UNDERGRADUATE MATHEMATICS SYMPOSIUM

NUMS 2026

TUESDAY, SEPTEMBER 29, 2026
3:15–7:05 PM

LEIGHTON HALL 305
CARLETON COLLEGE

3:15	Welcome
3:20-3:35	Sophie Kulyeva (Carleton): A Statistical Approach to Evaluating Image Quality in iNaturalist Biodiversity Data
3:40-3:55	Clara McGee (Carleton): Rainbow Diagrams for Knotted Surfaces
4:00-4:15	Kumiko Muro and Nathan Burns (St. Olaf): Group-weighted Higher Rank Graphs and their Kumjian-Pask Algebras
4:20-4:35	Jackson Rankin (Carleton): The Spatial Shuffle: A Constrained Jittering Approach to Data Privatization
4:40-4:55	Kemble Rains (St. Olaf): Homology of Group Action Lattices
5:00-5:15	Jincheng Zhao (Carleton): Multi-Omic Analysis of Blood Ceramides in Cardiometabolic Diseases
5:20-5:45	Dinner
5:50-6:05	Sonja Ebey (St. Olaf): Penalized Linear Regression for Thresholded Explosive Sensitivity Data
6:10-6:25	Caitlyn Holl (Carleton): The Sound of Silence: Comedic Timing from a Computational Perspective
6:30-6:45	Foblas Joseph, Emily Schmursal, and Garang Dau Akur (St. Olaf): Moves on Higher Rank Graphs
6:50-7:05	Will Zhong (Carleton): A Causal Mediation Analysis of Cortical Thickness in the Pathway from Caregiver-Related Adversity to Adolescent Psychopathology

