Kyla Pohl

Mathematics PhD Candidate – Graduate Employee

PRONOUNS: she/her
EMAIL: kyla.pohl@gmail.com
WEBSITE: https://kyla-pohl.github.io

RESEARCH INTERESTS

I work in combinatorics with specific interest in Jack symmetric functions and hook length formulae.

EDUCATION

University of Oregon, PhD   Expected: June 2026
Mathematics
Advisor: Ben Young

University of Oregon, MS   June 2021
Mathematics

St. Olaf College, BA, *magna cum laude*   May 2019
Major: Mathematics, Concentration: Japan Studies

Budapest Semesters in Mathematics Summer Program   June - Aug 2017

PUBLICATIONS

K. Pohl, B. Young; "Jack Combinatorics of the Equivariant Edge Measure;" submitted for publication.
https://arxiv.org/abs/2410.03912

R. Gaybullaev, A. Khudoyberdiyev, K. Pohl; "Classification of solvable Leibniz algebras with abelian nilradical and $k-1$ dimensional extension;" *Communications in Algebra*, 48:7 (2020), 3061-3078. https://arxiv.org/pdf/1808.06171.pdf

J. Dietz, M. Klein, S. Nycklemoe, K. Pohl; "Automorphism Orbits of some Metacyclic Groups;" *Pi Mu Epsilon Journal* 14, no. 9 (2018): 557-564.

PRESENTATIONS

Formal Power Series and Algebraic Combinatorics 2025 Sapporo   July 2025
Poster: Jack Combinatorics of the Equivariant Edge Measure

University of Oregon Student Counting Seminar   Feb 2025
A Markov Chain Monte Carlo Algorithm

Joint Mathematics Meetings 2025   Jan 2025
Jack Combinatorics of the Equivariant Edge Measure

University of Oregon Combinatorics Seminar   Nov 2024
Jack Combinatorics of the Equivariant Edge Measure

Lane Community College Introduction to STEM Seminar   Nov 2024
Partitions and Hook Walk Algorithms

University of Oregon Student Counting Seminar   Oct 2024
Jack Combinatorics of the Equivariant Edge Measure

University of Oregon Combinatorics Seminar   Nov 2023
An Introduction to Jack Symmetric Functions

University of Oregon Student Counting Seminar   Oct 2022
An Introduction to Ramsey Theory

Joint Mathematics Meetings 2019   Jan 2019
Classification of solvable Leibniz algebras with abelian nilradical and $k-1$ dimensional extension

Teaching Experience

Note: All classes conducted at the University of Oregon unless otherwise specified; * indicates remote, † indicates two sections.

Instructor of Record

Foundational Algebra and Mathematical Modeling	Fall 2024, †Fall 2023
Calculus I	Spring 2023
Precalculus II	Winter 2023, Fall 2022, Spring 2022
Precalculus I	Winter 2022, *Winter 2021
Elementary Statistics	*Summer 2020

Teaching Assistant

Elementary Statistics	Fall 2021, *Spring 2021, Winter 2025, Spring 2025
Precalculus I	*Fall 2020
Ballroom Dance I (St. Olaf College)	Fall 2018, Spring 2019

Tutoring

One-on-one Japanese language tutor (St. Olaf College)	Fall 2018

Grading

Introduction to Combinatorics – Linear Algebra I – Abstract Algebra I (St. Olaf College)

Professional Development

Journeys In Mathematics   June 2024
Massachusetts Institute of Technology

Cascade Lectures in Combinatorics   May 2024
University of Oregon

Summer School in Algebraic Combinatorics   July 2022
Krakow, Poland

BRIDGES Conference   July 2021
University of Utah

International Research Experience for Students   May - July 2018
Tashkent, Uzbekistan

Mentorship

UO Math Directed Reading Program   Jan 2023 - Present

- Led an undergraduate student through readings

- Advised student in writing and giving a 20 minute chalk talk on
  reading topic

Intransitive Dice   Winter 2025

- Student studied intransitive dice, basic tournament (graph) theory

- Student built intransitive dice set generator and checker in Python
  and tournament generator in SageMath

Partially Ordered Sets   Winter 2024

- Student read beginning of Chapter 3 of Stanley's Enumerative
  Combinatorics

- Reading culminated in student presenting the Fundamental
  Theorem of Finite Distributed Lattices

Ramsey Theory   Winter 2023

- Student explored introductory graph theory with an eye towards
  coloring via readings from A First Course in Graph Theory by
  Chartrand and Zhang

- Reading lead to student providing an overview of Ramsey theory

UO Math First-Year Graduate Mentorship Program   Sept 2022 - June 2024
Mentor

- Supported a student in the first year of their graduate program

- Met informally with student one-on-one over lunch once each term
  to check in

UO Women in Graduate Studies JUMP! Program   Oct 2022 - May 2023

- Mentored two undergraduate STEM students to further their personal, educational, and career skills in the sciences

- Discussed and guided interest in mathematics courses and summer programs with mentees

SERVICE

UO AWM Student Chapter   Sept 2019 - Present

Vice President   Sept 2024 - Present

- Scheduled and organized executive council meetings

- Assisted president with standard duties

- Coordinated aspects of general membership meetings

K-12 Committee Member   Sept 2021 - Present

- Developed lessons and activities to provide mathematics outreach to girls in local K-12 schools

- Guided children through mathematical explorations at local outreach events such as the Eugene Science Center's Girls' Science Adventure Days and Willagillespie Middle School STEAM Night.

Reading Room Committee Co-Chair   Sept 2020 - Present

- Managed a library of books highlighting underrepresented voices in mathematics

- Planned and hosted small group discussions about these topics

UO Math Directed Reading Program Organization Committee   Sept 2022 - Present

- Advertised the Directed Reading Program to undergraduates via the proliferation of posters and the annual Q & A event

- Organized Directed Reading Program all-participant meetings

- Corresponded with program participants regarding their program progress

Eugene Math Festival   Feb 2021 - Present

- Prepared pre-made exercises and activities for children ahead of the festival

- Set up and organized assigned booth before families arrived at the event

- Lead children through mathematics discovery activities

UO ADSE Nagoya Program   Feb 2025

- Delivered a short introductory talk introducing combinatorics to undergraduates from Nagoya University visiting UO

- Guided the students through tiling research activities to bolster understanding of day-to-day life in mathematics graduate school

- Conversed about attending graduate school in the US with these students

UO Mathematics Graduate Affairs Committee   Sept 2020 - Sept 2023
Student Representative

- Advised the department head on subjects pertaining to the graduate program

- Oversaw graduate student office occupancy changes

- Coordinated the first-year mentorship program and paired mentors and mentees

SCHOLARSHIP AND MEMBERSHIP

Association for Women in Mathematics

University of Oregon Mathematics Department 2019 Vitulli Scholar

Phi Beta Kappa Honor Society

Pi Mu Epsilon Honor Society

SKILLS

Japanese (Conversational)

SageMath/Python

LaTeX