ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

Invitation to the Doctoral Seminar

Michaela A. Polley

Dartmouth College (Hanover, New Hampshire)

"Patterns in Rectangulations"

N.2.57 | Thursday, 18 December 2025 | 10:00 a.m.

Abstract

A rectangulation is a decomposition of a rectangle into a finite number of interior rectangles. A configuration of segments which do not cross or share endpoints is called a pattern. In this talk I will give an overview of the classical enumeration results for rectangulations before diving into the emerging study of pattern avoidance in rectangulations. I will highlight connections to a variety of combinatorial objects, including permutations, inversion sequences, binary trees, parking functions, and Dyck paths. This talk includes joint work with Andrei Asinowski, Kyle Celano, Jennifer Elder, Namrata, and Torsten Mütze.

Andrei Asinowski and the Department of Mathematics look forward to seeing you at the talk!