ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

Invitation to the Doctoral Seminar

Dr. Sarah Jane Selkirk
University of Warwick

"Links between lattice paths and automata theory"

V.1.07 Wednesday, 20 November 2024 1:30 p.m.

Abstract

Given a set $\mathscr{S} \subseteq \{1\} \times \mathbb{Z}$, a directed lattice path with stepset $\mathscr{S}$ is a finite sequence whose elements are in $\mathscr{S}$. Visually, the elements of the sequence are drawn as vectors starting at $(0, 0)$. In this talk, we will discuss adaptations and restrictions that can be placed on these directed lattice paths, where the behaviour of associated generating functions remains 'nice'. This is as a result of language theoretic considerations, which will be discussed in the talk. Based on joint work with many people from the University of Klagenfurt!

Clemens Heuberger and the Department of Mathematics look forward to seeing you at the talk!