



# Analysis Seminar

## PATTERN-AVOIDING INVERSION SEQUENCES

By

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**Abstract:** Pattern-avoiding inversion sequences provide a unifying theme within enumerative combinatorics, establishing correspondences with other well-studied combinatorial structures such as lattice paths, words, and partitions. After introducing the foundational concepts, we will explore recent advances in the enumeration and probabilistic analysis of these sequences. Key highlights include explicit bijections, enumeration methods based on the generating tree technique, and an investigation into the rare regions of their graphical representations.

**Date:** October 15, Tuesday

**Time:** 14:00-15:00

**Place:** SA141 - Mathematics Seminar Room