

Pattern Enumeration in the Separable Permutations

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The separable permutations are those which can be built up from the trivial length-one permutation through repeated direct and skew sums, and are in bijection with a set of labelled plane trees. In this talk, we investigate pattern enumeration both within and across permutation classes, and focus in particular on the separable class. Using both structural and analytic tools, we classify the sets of equinumerous patterns within the separables, and show that these sets are in bijection with integer partitions.

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