

## THE NUMBER OF DISTINCT MINORS OF A PERMUTATION

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We investigate the number of distinct patterns of a fixed size contained in a given  $n$ -permutation. Starting with patterns of size  $n - 1$ , we find a correspondence between these and the number of consecutive adjacent entries of a permutation. Using this, we are able to derive exact formulas for the expectation and variance for the number of such patterns contained in a random  $n$ -permutation. Finally, we are able to extend this to a few results on distinct patterns of any fixed size.