

Superpatterns Containing Special Subsets of Permutations

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Abstract:

Pattern containment is a concept for how a permutation can be contained in a larger permutation, and arises naturally in many contexts. Let S_k be the set of permutations of length k . We say that a permutation p is a k -superpattern if it contains every element of S_k as a pattern. Then, a natural question to ask is, "What is the shortest length that a k -superpattern can be?" In this talk, we will discuss the general superpattern problem and some of its variations.