

Pattern Containment in Circular Permutations

Charles Lanning*, Hua Wang, Daniel Gray, Georgia Southern University

Pattern containment in permutations, as opposed to pattern avoidance, involves two aspects. The first is to contain every pattern at least once from a given set, known as superpatterns; while the second is to contain some given pattern as many times as possible, known as pattern packing. In this talk we explore these two questions in circular permutations and present some interesting observations. We also raise some questions and propose directions for future study.

Keywords: pattern packing, superpattern, circular permutation