
MOUSAVI HAJI SEYYED HAMOON, University of Waterloo

Repetition Avoidance in Circular Factors

We consider the following novel variation on a classical avoidance problem from combinatorics on words: instead of avoiding repetitions in all factors of a word, we avoid repetitions in all factors where each individual factor is considered as a “circular word”. We determine the best possible avoidance exponent for alphabet size 2 and 3, and provide a lower bound for larger alphabets. This is a joint work with Jeffrey Shallit.