

1112-05-435

Andrzej Dudek* (andrzej.dudek@wmich.edu), Kalamazoo, MI 49008. *On Ramsey-type problems for sequences.*

Ramsey theory can loosely be described as the study of structure which is preserved under finite decomposition. A classical Ramsey theorem states that in any r -coloring of the edges of a sufficiently large complete graph, one will always find a monochromatic complete subgraph.

In this talk, we discuss analogous results for sequences and permutations. In particular, we study the behavior of the following function $f(r, X)$, which is the length of the shortest sequence Y such that any r -coloring of the entries of Y yields a monochromatic subsequence that also preserves the order of X . (Received August 10, 2015)