An Upper Bound on the Scrambling Index

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The scrambling index of a primitive digraph D is the smallest positive integer k such that for every pair of vertices u and v, there is a vertex w such that we can get to w from u and v in D by directed walks of length k; it is denoted by $k(D)$. In this paper we give an upper bound on the scrambling index in terms of diameter d and girth s of primitive digraph D.

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