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Yezhou Wu* (yzwu@math.wvu.edu), 320 Armstrong, West Virginia University, Morgantown, WV 26505. *Minimum cardinality of feedback sets for line graphs.*

A subset of vertices (resp. arcs) of a graph G is called a feedback vertices (resp. arcs) set of G if its removal results in an acyclic subgraph. The problem to determine the minimum cardinality of the feedback sets is NP-hard for digraphs. the graph G . We will show the relations between the feedback vertices sets of graphs and the feedback arcs sets of their line graphs and give the exact minimum cardinality of the feedback vertices (resp. arcs) set of Kautz digraph $K(d, n)$ for $n \leq 7$ and a bound for $n \geq 8$. (Received September 12, 2010)