

1116-05-2864

Nafiseh Jahanbakht* (nafisej@okstate.edu) and **Kouros Tavakoli**. *Relationship between the energy of a directed graph and the energy of its underlying graph.*

The energy of a directed graph is defined to be the sum of the absolute values of the real parts of the eigenvalues of its adjacency matrix. The energy of a graph (undirected) is the sum of the absolute values of the eigenvalues of its adjacency matrix. Could there be any relation between the energy of a directed graph and the energy of its underlying graph? Under some conditions, the answer is yes. The question is still open in the general case. (Received September 22, 2015)