

1035-05-695

**Ji Young Choi\*** (jychoi@ship.edu), 1871 Old Main Drive, Department of Mathematics, Shippensburg Univ of PA, Shippensburg, PA 17257. *Boundaries of the minimum  $P_k$  total weights*. Preliminary report.

The sum of weights for each path of length  $k$  in a graph with edges of weight 1 or -1 is called the  $P_k$  total weight of the graph, and the minimum of the absolute value of the  $P_k$  total weight is called the minimum  $P_k$  total weight. This talk will present the boundaries of the minimum  $P_k$  total weights for the graphs, including paths, cycles, and simple types of trees. (Received September 13, 2007)