## 1011-05-244 Grady Bullington, Steven J Winters and Linda Eroh\* (eroh@uwosh.edu), Mathematics Department, University of Wisconsin Oshkosh, 800 Algoma Blvd., Oshkosh, WI 54901. More on Defensive Alliances in Graphs.

A defensive alliance in a graph is a set S of vertices so that every vertex in S has at least as many vertices of its closed neighborhood in S as it has neighbors not in S (for all  $v \in S$ ,  $|N[v] \cap S| \ge |N[v] \cap \overline{S}|$ ). We will discuss some bounds and realization theorems relating the defensive alliance number, strong defensive alliance number, global defensive alliance number, and domination number in graphs. (Received August 29, 2005)