

Meeting: 1003, Atlanta, Georgia, SS 24A, AMS Special Session on Design Theory and Graph Theory, I

1003-05-866 **Ralucca M. Gera*** (Ralucca.gera@wmich.edu), Mathematics Department, 1903 W. Michigan, Kalamazoo, MI 49008, and **Ping Zhang** (Ping.Zhang@wmich.edu), Mathematics Department, 1903 W. Michigan, Kalamazoo, MI 49008. *Stratified Domination in Graphs*.

A graph is 2-stratified if its vertex set is partitioned into two classes, where the vertices in one class are colored red and those in the other class are colored blue. Let F be a 2-stratified graph rooted at some blue vertex v . An F -coloring of a graph G is a red-blue coloring of the vertices of G in which every blue vertex u belongs to a copy of F rooted at u . The F -domination number is the minimum number of red vertices in an F -coloring of G . We present some results in this area. (Received October 06, 2004)