Disjoint Dominating Sets in Graphs

Sandra M. Hedetniemi, Stephen T. Hedetniemi and Renu Laskar*
Clemson University, Clemson, SC 29634,
Lisa Markus
De Anza College, Cupertino, CA 95014,
Peter J. Slater
Huntsville AL 35899.

Abstract: The disjoint domination number of a graph $G$ is the minimum cardinality of two disjoint dominating sets in $G$. In this paper, we introduce the disjoint domination number and study its graph theoretical and algorithmic properties.