1125-05-2371 **Anne C Sinko*** (asinko@csbsju.edu), 37 S. College Ave., St. Joseph, MN 56374. *The upper and lower independence-partition number on bipartite graphs.*

Colored-independence is a storage/scheduling problem which, in addition to the standard restriction involving pairs of elements that cannot be placed together, considers sets of elements that must be placed together. A set S is a colored-independent set if, for each color class V_i, $S \cap V_i = V_i$ or $S \cap V_i = \emptyset$. $\beta(G;S)$ is the maximum cardinality of a colored-independent set. The independence-partition number, $\beta_{PRT}(G)$, is then defined to be the maximum cardinality over all $\beta(G;S)$. The lower independence-partition number, $i_{PRT}(G)$, is defined to be the maximum cardinality over all $i(G;S)$, where $i(G;S)$ is the minimum cardinality of a maximal colored-independent set. This talk will examine results of $\beta_{PRT}(G)$ and $i_{PRT}(G)$ on bipartite graphs. Particular attention will be given to the characterization of bipartite graphs that achieve $i_{PRT}(T) = |V_1|$ where V_1 is the smaller of the bipartition sets of graph G. (Received September 20, 2016)