1067-05-1651 Sibel Ozkan (sozkan@mtu.edu) and Erik E Westlund* (erik.westlund@uwc.edu). Hall m-completable graphs. Preliminary report.

A partial proper *m*-coloring of a graph *G* is a proper coloring $\varphi : V_0 \to \{1, \ldots, m\}$, for some $V_0 \subseteq V(G)$. Define the list-assignment $L = L_{\varphi}$ by $L(v) = \{\varphi(v)\}$ if $v \in V_0$, and $L(v) = \{1, \ldots, m\} \setminus \{\varphi(N_G(v) \cap V_0)\}$ if $v \in V \setminus V_0$, where $N_G(v)$ denotes the neighborhood of v. φ has a completion to a proper *m*-coloring of *G* if and only if *G* has a proper L_{φ} -coloring. We say (G, L) satisfies Hall's condition if, for all subgraphs *H* of *G*, $|V(H)| \leq \sum_{\sigma \in \mathcal{C}} \alpha(H(\sigma, L))$, where $\alpha(H(\sigma, L))$ is the independence number of the subgraph of *H* induced on the vertices having σ in their lists. Hall's condition is necessary for *G* to have a proper *L*-coloring. *G* is said to be Hall *m*-completable, for some $m \geq \chi(G)$, if ever partial proper *m*-coloring φ , such that (G, L_{φ}) satisfies Hall's condition, has a completion. In this talk, we discuss new results in classifying Hall *m*-completable graphs for certain values of *m*. (Received September 21, 2010)