1043-05-60   **Daniel Cranston**, **Seog-Jin Kim** and **Gexin Yu*** (gyu@wm.edu), Department of Mathematics, College of William and Mary, Williamsburg, VA 23187. *Injective coloring of graphs.* Preliminary report.

An injective coloring of a graph is an assignment of colors to vertices so that any two vertices sharing a common neighbor receive different colors. The injective chromatic number of a graph is the minimum number of colors needed for an injective coloring. Note that an injective coloring is not necessarily proper.

People studied the injective chromatic numbers of planar graphs with girth conditions and graphs with maximum average degree constraints. In this talk, I will introduce some recent results on this topic. (Received August 14, 2008)