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Wayne Goddard and **Honghai Xu*** (honghax@g.clemson.edu). *Vertex Colorings without Rainbow Subgraphs.*

Consider a coloring of the vertices of a graph. We say that a subgraph is *rainbow* if all its vertices receive different colors. We define the *F-upper chromatic number* of G as the maximum number of colors that can be used to color the vertices of G such that there is no rainbow copy of F . We present some results on this parameter for certain graph classes. The focus is on the case that F is a star or triangle. For example, we show that the K_3 -upper chromatic number of any maximal outerplanar graph on n vertices is $\lfloor n/2 \rfloor + 1$. (Received September 22, 2015)