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**Chun-Hung Liu** and **Gexin Yu\*** (gyu@wm.edu), College of William and Mary, Williamsburg, VA 23188. *Linear colorings of subcubic graphs*. Preliminary report.

A linear coloring of a graph is a proper coloring of the vertices of the graph so that each pair of color classes induces a union of disjoint paths. In this paper, we prove that every graph with maximum degree at most three has linear list chromatic number at most four so that the neighbors of every degree two vertex receive different colors, unless the graph is  $C_5$  or  $K_{3,3}$ . This confirms a conjecture raised by Esperet, Montassier, and Raspaud. Our proof is constructive and yields a linear-time algorithm to find such a coloring. (Received August 28, 2012)