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Ellen Panofsky* (erp39@cabrini.edu), 610 King of Prussia Rd, Radnor, PA 19087, and **Garth Isaak**. *L(2,1) Labeling of Graphs of Bounded Bandwidth and Permutation Graphs*. Preliminary report.

An $L(2,1)$ labeling of a graph has labels of adjacent vertices differing by at least two and different labels for vertices at distance two. The minimum span of such a labeling is called the $L(2,1)$ number and is denoted $\lambda_{2,1}(G)$ for any graph G . Griggs and Yeh conjectured that for every graph G , $\lambda_{2,1}(G) \leq \Delta^2$. Calamoneri et al. showed that $4\Delta + 1$ for permutation graphs and asked about a similar bound for AT-free graphs. We extend their result to graphs of bounded bandwidth and in particular, show $\lambda_{2,1}(G) \leq 6\Delta + 3$ for AT-free graphs. We also improve the permutation graphs bound when $\Delta = 3, 4$ in order to show the Griggs-Yeh bound for all Δ . (Received September 21, 2010)