1106-VN-242 **Nathaniel Karst**, **Jessica Oehrlein*** (jessica.oehrlein@students.olin.edu), **Denise Sakai Troxell** and **Junjie Zhu**. *Distance Labelings of Amalgamations and Injective Labelings of General Graphs.*

An $L(2,1)$-labeling of a graph G is a function assigning a non-negative integer to each vertex such that adjacent vertices are labeled with integers differing by at least 2 and vertices at distance two are labeled with integers differing by at least 1. The minimum span across all $L(2,1)$-labelings of G is denoted $\lambda(G)$. An $L'(2,1)$-labeling of G and the number $\lambda'(G)$ are defined analogously, with the additional restriction that the labelings must be injective. We determine $\lambda(H)$ where H is a join-page amalgamation of graphs which is defined as follows: given $p \geq 2$, H is obtained from the pairwise disjoint union of graphs $H_0, H_1, \cdots, H_p$ by adding all the edges between a vertex in H_0 and a vertex in H_i for $i = 1, 2, \cdots, p$. Motivated by these join-page amalgamations, we show that $\lambda'(G) = \max\{n-1, \lambda(G)\}$, where n is the number of vertices in G. (Received August 13, 2014)