Meeting: 1006, Lubbock, Texas, SS 7A, Special Session on Topology of Dynamical Systems

1006-54-67 **W. T. Ingram*** (ingram@umr.edu), Spring Branch, TX 78070. *Two-pass Maps and Indecomposability of Inverse Limits of Graphs.*

Two subgraphs G_1 and G_2 of a graph G are *non-overlapping* provided if p is a point of $G_1 \cap G_2$ then p is an end point of both G_1 and G_2. A map $f : G \to G$ is a *two-pass map* provided there exist non-overlapping subgraphs G_1 and G_2 of G such that $f[G_1] = f[G_2] = G$. In this paper we show that an inverse limit of an n-od using a single two-pass bonding map produces an indecomposable continuum. This extends a well-known result for inverse limits on intervals. Then we show that if G is a graph that is neither an arc nor an n-od, there is a two-pass map of G onto itself such that $\varprojlim \{G, f\}$ is decomposable. (Received February 03, 2005)