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Krystyna M Kuperberg* (kuperkm@auburn.edu), Auburn University, 221 Parker Hall, Auburn, AL, and Kevin Gammon (gammokb@auburn.edu), Auburn University, 221 Parker Hall, Auburn, AL 36849-5310. Applications of the Bellamy-Lewis theorem on the two-point compactification of the infinite cover of the pseudo-circle. Preliminary report.

There are two famous examples of hereditarily indecomposable continua: the pseudo-arc and the pseudo-circle. The pseudo-arc is chainable and homogenous. The pseudo-circle is circularly chainable, not chainable, and not homogenous.

Several proofs of nonhomogeneity of the pseudo-circle are known in the literature: the original proofs by L. Fearnley (1969) and J.T. Rogers, Jr. (1970), discovered independently, and later proofs by C.L. Hagopian (1976), J.T. Rogers (1981), and J. Kennedy and J.T. Rogers (1986).

A pseudo-solenoid is an inverse limit of pseudo-circles with finite covering maps used as bonding maps. In 1981, W. Lewis proved that any homogeneous continuum whose every proper subcontinuum is the pseudo-arc is itself the pseudo-arc, thus rendering all pseudo-solenoids nonhomogeneous.

In 1992, D. Bellamy and W. Lewis proved that the two-point compactification of the infinite covering space of the pseudo-circle is the pseudo-arc, giving an inspiration to the paper "A short proof of nonhomogeneity of the pseudo-circle" [to appear in PAMS]. We continue to use the Bellamy-Lewis theorem to give an alternate proof that no pseudo-solenoid is homogeneous. (Received August 20, 2008)