

1051-54-206

Dale Daniel* (dale.daniel@lamar.edu), Lamar University, Department of Mathematics, Box 10047, Beaumont, TX 77710-0047. *A General Lifting Characterization of Images of Arcs.*

Let X be a continuum and G an upper semi-continuous decomposition of X . If each element of G and the quotient space X/G are continuous images of arcs, when is X the continuous image of an arc? We study this question by giving a very general characterization of such X that admit a lift to X of a map of an arc onto a quotient space of X . We then obtain a number of corollaries - some of which are new and some of which are already found in the literature. (Received August 25, 2009)