

Weakly confluent images of the cylinder and cone over the Cantor set

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Given an onto map $f : X \rightarrow Y$ between continua we say that f is *weakly confluent* if for each subcontinuum B of Y there is a subcontinuum A of X such that $f(A) = B$. In 1978 H. Cook and A. Lelek proved that among continua the weakly confluent images of the cylinder over the Cantor set are exactly the regular curves. We prove that for locally connected continua to be a confluent image of the cylinder over the Cantor set is equivalent to be a confluent image of the cone over the Cantor set.

(joint work with A. Illanes, V. Martínez de la Vega, D. Michalik)