Topological fractals

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A compact metric space X is called a metric fractal if there are finitely many contractions of X whose images cover X. A compact metrizable space X is called a topological fractal if there are finitely many continuous selfmaps of X whose images cover X and the images of all finite compositions of these functions form a null sequence. A 1985 conjecture by M. Hata is claiming that every Peano continuum is a topological fractal. Recently it was proved that every Peano continuum with a free arc is a topological fractal. Jointly with K. Karasová we proved that every Peano continuum with uncountably many local cut-points is a topological fractal as well.