feebly monotone

Let X and Y be continua. A mapping $f : X \to Y$ is said to be *feebly monotone* provided that if A and B are proper subcontinua of Y such that $Y = A \cup B$, then their inverse images $f^{-1}(A)$ and $f^{-1}(B)$ are connected.

finitely Suslinean

a continuum X is *finitely Suslinean* if, for each positive number ε, X does not contain infinitely many mutually exclusive subcontinua of diameter greater than ε.

finitely linear

A function $f\, I \to Y$, where I is a closed interval of the real line, is called *finitely linear* provided there exists a positive integer m such that I can be decomposed, for each $\varepsilon > 0$, into a finite number of closed subintervals $I_1, I_2, \cdots, I_k$ each of length less than ε and with the property that the set $f(I_i)$ meets at most m of the sets $f(I_1), f(I_2), \cdots, f(I_k)$ for $i = 1, 2, \cdots, k$.

fixed point

We say that a function $F : X \to 2^X$ (or a function $F : X \to C(X)$) *has a fixed point* provided that there is a point $x \in X$ such that $x \in F(x)$.

fixed set property

A topological space X is said to have the *fixed set property* for a certain class C of maps of X onto itself provided there exists, for each non-empty closed set A in X, a map f in C such that $f(x) = x$ if and only if x is in A.

fixed point self-homeomorphic

A topological space X is called *fixed point self-homeomorphic* if for any point p, any neighborhood U of p, there is an embedding $h : X \to U$ with $h(p) = p$ and $p \in \operatorname{int} h(X)$.

fixed ball self-homeomorphic

A topological space X is called *fixed ball self-homeomorphic* if for any point p, any neighborhood U of p, there is a neighborhood V of p with $V \subseteq U$ and an embedding $h : X \to U$ satisfying $h|_V = \mathrm{id}_V$.