Strong Mazurkiewicz manifolds

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The notion of Cantor n-manifolds is well known: A compact metric space is a Cantor n-manifold if it cannot be separated by any closed $(n-2)$-dimensional subset. There are different generalizations of that notion. One is the Mazurkiewicz n-manifold which is a locally compact separable metric space X such that for every $(n-2)$-dimensional set $M \subset X$ and any two disjoint closed sets $A, B \subset X$ both with nonempty interiors there is a continuum $C \subset X \backslash M$ meeting A and B. In the present talk we consider a stronger version of Mazurkiewicz n-manifolds: A metric compactum X is said to be a strong Mazurkiewicz n-manifold ($SMM(n)$) if for every $(n-2)$-dimensional set $M \subset X$ and every points $x_0, x_1 \in X \backslash M$ there exists a continuum $C \subset X \backslash M$ joining x_0 and x_1. We describe some $SMM(n)$ and their properties. Note that $X \backslash M$ may not be linearly connected, for example, every metric compactum X contains a 0-dimensional set M such that $X \backslash M$ doesn't contain any arc.