The hyperspace of large order arcs

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A continuum is a compact connected metric space. Given a continuum X, let $C(X)$ denote the hyperspace of non-empty subcontinua of X, metrized with the Hausdorff metric. A large order arc in $C(X)$ is an arc $\mathcal{L}$ in $C(X)$ joining X to an element of the form $\{x\}$, for some $x \in X$, and such that for every pair $A, B \in \mathcal{L}$, we have that $A \subset B$ or $B \subset A$. Let $LOA(X)$ denote the set consisting of all large order arcs in $C(X)$, considered as a subspace of $C(C(X))$. In this talk we present several topological properties of $LOA(X)$ and its relations to topological properties of X.

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