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On Pixley-Roy hyperspaces

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This is a joint work with I. Juhász to appear in Topology and its Appl. Let X be a topological space. X is said to have property C if for all $X' \in [X]^{\omega_1}$ any family of cardinality $\aleph_1$ of open subsets of X' has a countable network.

<u>Theorem 1.</u> Assuming C.H. there exists a 0-dimensional Hausdorff space X having property C such that the Pixley-Roy hyperspace $F[X]$ does not satisfy the countable chain condition.

<u>Theorem 2.</u> Assuming $MA_{\aleph_1}$, a T_2 space X satisfies condition C iff its Pixley-Roy hyperspace satisfies the countable chain condition.