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**ABSTRACT** 

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## Chains of Different Dimensional Topologies

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If X is a set with cardinal at least c, there is a sequence  $T_0$ ,  $T_1$ , ... of complete metric topologies on Xsuch that for each non-negative integer i,  $T_1$  contains  $T_{i+1}$  and  $dim(X,T_i) = i$ . Various types of these "chains" are possible. For example, if card(X) = c, there is a chain such that each  $T_i$  is separable; if card(X)  $\geq$  c, there is a chain such that each  $T_1$  is locally separable.



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