

# Open problems on embeddings of Cantor sets in Euclidean ( $n \geq 3$ )-spaces

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A Cantor set is characterized as a topological space that is totally disconnected, perfect, compact and metric. Any two such spaces  $C_1$  and  $C_2$  are homeomorphic, but if  $C_1$  and  $C_2$  are subspaces of  $R^n$ ,  $n \geq 3$ , there may not be a homeomorphism of  $R^n$  to itself taking  $C_1$  to  $C_2$ . In this case,  $C_1$  and  $C_2$  are said to be *inequivalent* embeddings of the Cantor set.

There has been recent renewed attention to properties of embeddings of Cantor sets since these sets arise in the settings of dynamical systems, ergodic theory and group actions.

This talk will be a survey of conjectures and questions concerning embeddings of Cantor sets in various Euclidean spaces. The emphasis will be on geometric properties of the embeddings.