Open problems on embeddings of Cantor sets in Euclidean $(n \ge 3)$ -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 \mathbb{R}^n , $n \geq 3$, there may not be a homeomorphism of \mathbb{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.