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Title:

C^1 -stable intersections of regular Cantor sets do not exist

Abstract:

We will prove that, given two C^1 -regular Cantor sets K and K' , it is possible to find regular Cantor sets arbitrarily close in the C^1 topology to K and K' which are disjoint. We conclude that generic pairs (K, K') of regular Cantor sets in the C^1 topology are such that the arithmetic difference $K - K'$ (which is the set of the real numbers t such that K intersects $K' + t$) has empty interior, i.e., is a Cantor set.