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Compacta are maximally G_δ -resolvable

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Abstract: It is well-known that compacta (i.e. compact Hausdorff spaces) are maximally resolvable, that is every compactum X contains $\Delta(X)$ many pairwise disjoint dense subsets, where $\Delta(X)$ denotes the minimum size of a non-empty open set in X . The aim of this note is to prove the following analogous result: Every compactum X contains $\Delta_\delta(X)$ many pairwise disjoint G_δ -dense subsets, where $\Delta_\delta(X)$ denotes the minimum size of a non-empty G_δ set in X .

Keywords: compact spaces, G_δ -sets, resolvability

AMS Subject Classification: 54A25, 54D30, 03E10

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