

# Minimal non-trivial closed hereditary coreflective subcategories in categories of topological spaces

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By **Top** we denote the category of all topological spaces and continuous maps. All subcategories of **Top** are assumed to be full and isomorphism-closed. Let **A** be an epireflective subcategory of **Top**. It is interesting to study closed hereditary coreflective subcategories in **A**. Recall that a subcategory is epireflective in **Top** if and only if it is closed under the formation of subspaces and topological products. A subcategory is coreflective in **A** if and only if it is closed under the formation of topological sums and extremal quotient objects. A coreflective subcategory of **A** will be called non-trivial if it contains a non-discrete space. We are interested in the following:

**Question.** Which non-trivial closed hereditary coreflective subcategories of **A** are minimal with this property?

In the talk we will answer the above question for certain epireflective subcategories **A** of **Top**.