

Dimension and continuous function

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Abstract

In the framework of general topology there are various definitions of dimension for a topological space (all them different from each other): small inductive dimension, large inductive dimension, covering dimension, and arithmetic dimension. These notions, which coincide for separable metric spaces, are give in terms of the open and closed sets. In this talk we approach the problem of obtaining the dimension of a separable metric space X in terms of the real continuous functions on X , and we conjecture a solution.