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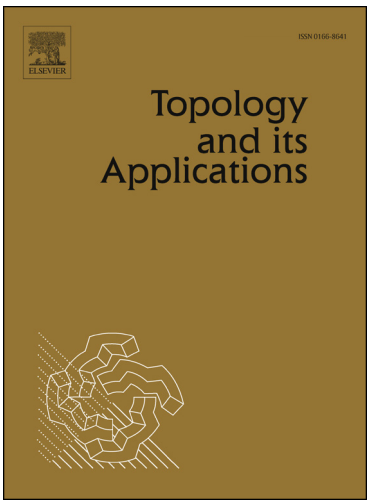

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On hyperspaces of non-cut sets of continua

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Abstract

In this paper we study the hyperspace of some kinds of non-cut sets of continua. This complements the study that has been done for non-cut points in continua by several authors.

Keywords: Continuum, hyperspace, non-block set, non-cut set, shore set .
2000 MSC: Primary, 54B20; Secondary, 54F15

1. Introduction

A *continuum* is a nondegenerate compact connected metric space. We denote the hyperspace of all nonempty closed subsets of a continuum X by 2^X, the hyperspace of subcontinua of X by $C(X)$, and the hyperspace of all nonempty subsets of X having at most n points, where n is a positive integer, by $F_n(X)$. These hyperspaces are considered with the Hausdorff metric, see [12, p. 1].

It is a remarkable result due to R. L. Moore that every continuum has at least two non-cut points, see [9, p. 177]. This has been recently generalized to other types of non-cut points, see [3] and [10]. Regarding to the study of non-cut sets in continua we quoted the papers [2], [3], [4], [5], [6], [7] , [8] and

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