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NON-BLOCKERS OF DECOMPOSABLE CONTINUA WITH THE PROPERTY OF KELLEY, AND THE SET FUNCTION $\mathcal{T}$

SERGIO MACÍAS

Abstract. Given a continuum X, let $\mathcal{F}_1(X)$ be the family of singletons of X and let $\mathcal{NB}(\mathcal{F}_1(X))$ be the hyperspace of non-blockers of $\mathcal{F}_1(X)$. We use Professor Jones' set function $\mathcal{T}$ to present a different proof of the two main theorems of J. Camargo and M. Ferreira in Nonblockers for hereditarily decomposable continua with the property of Kelley. We show a proposition of independent interest, which is key to present a different proof of the second main theorem of Camargo and Ferreira, namely: if X is a hereditarily decomposable continuum with the property of Kelley such that $\mathcal{NB}(\mathcal{F}_1(X))$ is a continuum, then X is a simple closed curve. We also prove that if X is a decomposable, not hereditarily decomposable continuum with the property of Kelley and $\mathcal{NB}(\mathcal{F}_1(X))$ is a continuum, then the set function $\mathcal{T}$ is continuous. Hence, X has a continuous decomposition $\mathcal{G}$ such that many elements of $\mathcal{G}$ are indecomposable subcontinua of X.

1. Introduction

Given a continuum X, let $\mathcal{F}_1(X)$ denote the family of singletons of X and let $\mathcal{NB}(\mathcal{F}_1(X))$ be the hyperspace of non-blockers of $\mathcal{F}_1(X)$. We use Professor Jones' set function $\mathcal{T}$ to present a different proof of the two main theorems of J. Camargo and M. Ferreira in [4]. We show a

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