

Nonblockers for hereditarily decomposable continua with the property of Kelley

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Let X be a continuum and let $A, B \in 2^X$ such that $A \cap B = \emptyset$. We say that A *does not block* B provided that

$$\kappa_{X \setminus A}(B) = \bigcup \{L \in \mathcal{C}(X) : B \cap L \neq \emptyset \text{ and } L \subseteq X \setminus A\},$$

is a dense subset of X . Let

$$\mathcal{NB}(\mathcal{F}_1(X)) = \{A \in 2^X : A \text{ does not block } \{x\} \text{ for each } x \in X \setminus A\}.$$

$\mathcal{NB}(\mathcal{F}_1(X))$ is called the *hyperspace of non-blockers of $\mathcal{F}_1(X)$* . In this talk, we show that if X is hereditarily decomposable with the property of Kelley such that $\mathcal{NB}(\mathcal{F}_1(X))$ is a continuum, then X is a simple closed curve.

(joint work with Mayra Ferreira)