

# Blocking properties of the diagonal in Cartesian product

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Given a continuum  $X$ , let  $\Delta = \{(x, x) \in X^2 : x \in X\}$ . We deal with six topological concepts that describe that  $\Delta$  is on the "edge" of  $X^2$ , namely when  $\Delta$  is: colocal connected, non-weak cut, non-block, shore, non-strong center and non-cut in  $X^2$ . During my talk I will present some new results concerning this topic, when  $X$  belongs to one of the following classes: locally connected continua, arc-like continua, indecomposable continua and metric compactifications of the ray  $[0, \infty)$ .