TOUCH POINTS IN IDEAL ČECH CLOSURE SPACES

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Abstract. Let $(X, f, \mathcal{I})$ be a Čech closure space with an ideal $\mathcal{I}$. For a subset A of X, the set $\widetilde{f}(A)$ of so-called a Čech touch points is defined as follows: $\widetilde{f}(A) = \{x \in X : A \cap N \notin \mathcal{I} \text{ for every } N \in \mathcal{N}(x)\}$. We investigate the properties of touch points and construct a topology on X from the touch points. Moreover, in an ideal Čech closure space $(X, f, \mathcal{I})$, we define f-compatibility with the ideal $\mathcal{I}$ and obtain several characterizations of the compatibility.

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Key words. Čech closure operator, ideal Čech closure space, f-compatible with an ideal.

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