

# Some compact-type and Lindelöf-type relative versions of star-covering properties

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Given a topological space  $X$ , a subset  $A$  and an open cover  $\mathcal{U}$  of it, the star of  $A$  with respect to  $\mathcal{U}$  is defined by the set  $st(A, \mathcal{U}) = \bigcup \{U \in \mathcal{U} : U \cap A \neq \emptyset\}$ . In last decades, many ways to cover a set with stars were discovered and studied. Recently, new classes of star covering properties, defined as relative versions of known ones, were introduced by Kočinac, Konca and Singh (see [1] and [2]). We study some of these compact-type and Lindelöf-type properties.

- [1] L. KOČINAC, S. KONCA, AND S. SINGH, *Set star-menger and set strongly star-menger spaces*, Math. Slovaca, 72 (2022), pp. 185–196.
- [2] L. KOČINAC AND S. SINGH, *On the set version of selectively star-CCC spaces*, J. Math., (2020), pp. Article ID 9274503, 7 pages.

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