Set strongly star-Rothberger and set star-Rothberger spaces

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A space X is said to be set star-Rothberger (set strongly star-Rothberger) if for each nonempty set A of X and for each sequence $(\mathcal{U}_n : n \in N)$ of collections of sets open in X such that $\overline{A} \subset \cup\mathcal{U}_n$, $n \in N$, there is a sequence $(U_n : n \in N)$ (resp., $(x_n : n \in N)$) such that for each $n \in N$, $U_n \in \mathcal{U}_n$ (resp., $x_n \in \overline{A}$) and $A \subset \bigcup_{n\in N} St(U_n,\mathcal{U}_n)$ (resp., $A \subset \bigcup_{n\in N} St(x_n,\mathcal{U}_n)$). In this talk, we investigate the relationship among set star-Rothberger, set strongly star-Rothberger and other related spaces and study the topological properties of set star-Rothberger and set strongly star-Rothberger spaces.

References

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