Some Generalizations of Compact and Paracompact Spaces

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Abstract

For any given topological property $P$ the concept of $S$-$P$-spaces is introduced. Especially $S$-compact and $S$-Paracompact spaces are studied in detail. Compactness and $H$-closedness are compared with $S$-compactness. Several types of functions, called strongly continuous, strongly open and strongly closed are considered and invariance of $S$-$P$-spaces under such functions are studied. Also a new separation axiom namely; $S$-$T_2$-space is obtained.