

ON R_L TOPOLOGICAL SPACES

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Abstract: The aim of this paper is to introduce a new separation axiom called R_L and study some of its fundamental properties.

Keywords and Phrases: L -bounded set, R_L -separation axiom, countably compact.

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1. Preliminaries

The notion of R_0 topological space is introduced by Shanin [16] in 1943. Davis [4] rediscovered it independently and studied some properties of this weak separation axiom. Several topologists (e. g. [8], [9], [10], [13]) further investigated properties of R_0 topological spaces and many interesting results have been obtained in various contexts. In the same paper, Davis also introduced the notion of R_1 topological space which are independent of both T_0 and T_1 but strictly weaker than T_2 .

Throughout the paper (X, τ) (or simply X) will always denote a topological space. For a subset A of X , the closure and interior of A in X are denoted by $Cl(A)$ and $Int(A)$, respectively. Recall that a topological space (X, τ) is said to be