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r-Realcompact spaces

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Abstract: A new generalization of realcompactness based on ultrafilters of regular F_σ -subsets is introduced. Its relationship with realcompactness, almost realcompactness, almost* realcompactness, c-realcompactness is examined. Some of the properties of the newly introduced space is studied as well.

Keywords: regular F_σ -subsets, almost realcompactness, almost* realcompactness, r-weak cb, regular Oz, regular countably paracompact

AMS Subject Classification: 54D60

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