

**Cammaroto, F.; Noiri, T.**

**On  $R$ -compact spaces.** (English) Zbl 0752.54007  
Mat. Vesn. 41, No. 3, 141-147 (1989).

Let  $\mathcal{U}$  and  $\mathcal{V}$  be open covers of a space  $X$ .  $\mathcal{V}$  is a shrinkable refinement of  $\mathcal{U}$  [the reviewer with *M. P. Berri* and *R. M. Stephenson jun.*, Proc. Kanpur Topol. Conf. 1968, 93–114 (1971; [Zbl 0235.54018](#))] if for each  $V \in \mathcal{V}$ , there is a  $U \in \mathcal{U}$  such that  $\text{cl } V \subseteq U$ . A space is  $U(i)$  or quasi- $U$ -closed [*C. T. Scarborough*, Pac. J. Math. 27, 611–617 (1968; [Zbl 0189.23104](#))] if every open cover with shrinkable refinement has a finite subfamily whose closures cover. The authors introduce the concept of  $R$ -compactness; a space is  $R$ -compact if every open cover with shrinkable refinement has a finite subcover. It follows that a quasi- $H$ -closed space is  $R$ -compact and an  $R$ -compact space is quasi- $U$ -closed. Many characterizations and some mapping results of  $R$ -compact are obtained.

Reviewer: J. R. Porter (Lawrence)

**MSC:**

[54D30](#) Compactness  
[54D25](#) “ $P$ -minimal” and “ $P$ -closed” spaces

Cited in 1 Document

**Keywords:**

quasi- $H$ -closed space; almost compact space