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PARACOMPACTNESS IN GENERALIZED TOPOLOGICAL SPACES

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Abstract: In this paper we introduce the concepts $\mathcal{G}$ - locally finite, $\sigma_{\mathcal{G}}$ - locally finite and $\mathcal{G}$ - paracompactness. Also discuss about some properties of these concepts. Here we investigate that some properties in topological spaces and generalized topological spaces (GTS) are coincides if we replace open sets by generalized open sets ($\mathcal{G}$ - open sets). Also, we provide some examples to show some results are invalid in the case of GTS.

Keywords and Phrases: $\mathcal{G}$ - locally finite, $\sigma_{\mathcal{G}}$ - locally finite, $\mathcal{G}$ - paracompactness.

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1. Introduction

Topological apace has been generalized in many ways, some of them are supra topological space [10] and generalized topological space [8]. A. S. Mashhour introduce the supra topological spaces in [10] and discuss about supra open sets, neighborhood, continuity etc in supra toplogical spaces. T.M. Al-Shami introduces and discuss about some fundamental properties of supra completly Hausdorff and