

## Ω-BOUNDEDNESS IN L-TOPOLOGICAL SPACE

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Abstract

In this paper, we introduce and study the notion of  $\Omega$ -boundedness on arbitrary *L*-sets in *L*-topological spaces by using the notion of upper limit of  $\Omega$ -nets. Several characterizations of  $\Omega$ -boundedness in terms of convergence theory of constant  $\alpha$ -nets,  $\alpha$ -ideals are obtained. We prove that the notion is good extension, productive and topologically invariant.

**Keywords and phrases:** molecules, *R*-neighborhoods, *L*-topological space, limit and cluster points,  $\Omega$ -nets, constant  $\alpha$ -nets,  $\alpha$ -filters,  $\alpha$ -ideals,  $\Omega$ -compact and  $\Omega$ -bounded sets.



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