

APPLICATIONS OF MAXIMAL μ -OPEN SETS IN GENERALIZED TOPOLOGY AND QUASI TOPOLOGY

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Abstract

In this paper, some fundamental properties of maximal μ -open sets such as decomposition theorem for a maximal μ -open set, are given in a generalized topological space. Some basic properties of intersection of maximal μ -open sets are established, cohere the law of μ -radical μ -closure in a quasi topological space is obtained, among the other things.

Keywords: μ -open set, maximal μ -open set, μ -radical.

2010 Mathematics Subject Classification: 54A05, 54D99.

REFERENCES

- [1] À. Császàr, *Generalized topology, generalized continuity*, Acta Math. Hungar. **96** (2002) 351–357. doi:10.1023/A:1019713018007
- [2] À. Császàr, *Generalized open sets in generalized topologies*, Acta Math. Hungar. **106** (2005) 53–66. doi:10.1007/s10474-005-0005-5
- [3] À. Császàr, *Remarks on quasi topologies*, Acta Math. Hungar. **119** (2008) 197–200. doi:10.1007/s10474-007-7023-4
- [4] N. Jacobson, *The radical and semi-simplicity for arbitrary rings*, Amer. J. Math. **67** (1945) 300–320. doi:10.2307/2371731

- [5] W.K. Min, *A note on quasi-topological spaces*, Honam Math. Jour. **33** (2011) 11–17. doi:10.5831/HMJ.2011.33.1.011
- [6] F. Nakaoka and N. Oda, *Some applications of minimal open sets*, Int. Jour. Math. Math. Sci. **27(8)** (2001) 471–476. doi:10.1155/S0161171201006482
- [7] F. Nakaoka and N. Oda, *Some properties of maximal open sets*, Int. Jour. Math. Math. Sci. **21** (2003) 1331–1340. doi:10.1155/S0161171203207262
- [8] B. Roy and R. Sen, *Maximal μ -open and minimal μ -closed sets via generalized topology*, Acta Math. Hungar. **136** (2012) 233–239. doi:10.1007/s10474-012-0201-z

Received 29 November 2012

Revised 22 May 2013