Fasc. Matematica, Tom XXII (2015), Issue No. 1, 119–123

OPERATION APPROACH OF g^* -CLOSED SETS IN IDEAL TOPOLOGICAL SPACES

S. JAFARI¹, A. SELVAKUMAR², M. PARIMALA³

ABSTRACT. In this article we introduce (\mathcal{I}, γ) - g^* -closed sets in topological spaces and also introduce γg^* - $T_{\mathcal{I}}$ -spaces and investigate some of their properties.

References

- [1] R. Devi, V.Kokilavani and M.Rajik, (\mathcal{I}, γ) -g α -closed sets in ideal topological space (submitted).
- [2] R. Devi, A.Selvakumar and M.Vigneshwaran, (*I*, γ)-generalized semi-closed sets in topological space, Filomat, 24:1 (2010), 97-100.
- [3] J. Dontchev, On Hausdorff spaces via topological ideals and *I-irresolute functions*, Annals of the New York Academy of Sciences, Papers on General Topology and Applications, Vol. 767 (1995), 2838.
- [4] J.Dontchev. M.Ganster and T.Noiri, Unified operation approach of generalized closed sets via topological ideals, Math. Japonica, 49(1999), 395-401.
- [5] T.R. Hamlett, David Rose and Dragan Jankovic, Paracompactness with respect to an ideal, Internat. J. Math. Math. Sci., 20(3)(1997), 433-442.
- [6] D.Jankovic and T.R.Hamlett, New topologies from old via ideals, Amer. Math. Monthly, 97(4)(1990), 295-310.
- [7] S.Kasahara, Operation-compact spaces, Math. Japon., 24 (1979), 97-105.
- [8] N.Levine, Generalized closed sets in topology, Rend. Circ. Mat. Palermo (2), 19 (1970), 89-96.
- [9] N.Levine, Semi-open sets and semi-continuity in topological spaces, Amer. Math. Monthly, 70 (1963), 36-41.
- [10] O.Njastad, On some classes of nearly open sets, Pacific J. Math., 15(1965), 961-970.
- [11] H.Ogata, Operations on topological spaces and associated topology, Math. Japon., 36 (1991), 175-184.
- [12] J.Tong, Expansion of open sets and decomposition of continuous mappings, Rend. Circ. Mat. Palermo (2), 43 (1994), 303-308.
- [13] R. Vaidyanathaswamy, Set Topology, Chelsea Publishing Company, New York, 1960.
- [14] M.K.R.S. Veera Kumar, Between g*-closed sets and g-closed sets, Antartica J. Math., 3(1)(2006), 43-65.

Received 25 February 2014

E-mail address: 1 jafari@stofanet.dk, 2 selvam_mphil@yahoo.com, 3 rishwathpari@gmail.com

¹ College of Vestsjaelland Syd, Herrestraede 11, 4200 Slagelse, Denmark.

 $^{^{\}rm 2}$ Department of Mathematics, Info Institute of Engineering, Coimbatore, Tamilnadu, India

 $^{^3}$ Department of Mathematics, Bannari Amman Institute of Technology, Sathyamangalam, Erode, Tamilnadu, India

²⁰⁰⁰ Mathematics Subject Classification. 54B05, 54C08, 54D05.