Connectedness via b - open sets

SHYAMAPADA MODAK and TAKASHI NOIRI

ABSTRACT.

In this paper we define a new type of connectedness by using b - open sets and discuss the relationship between this connectedness and various types of connectedness already defined in topological spaces.

REFERENCES

[1] Andrijević, D., *On b - open sets*, Mat. Vesnik, **48** (1996), 59–64
[2] Caldas, M., Jafari, S. and Latif, R. M., *b - open sets and a new class of functions*, Pro Mathematica Peru, **23** (2009), No. 45-46, 155–174
[3] Ekici, E., *On γ - US spaces*, Ind. J. Math., **47** (2005), No. 2-3, 131–138
[4] Ekici, E., *On γ - normal spaces*, Bull. Math. Soc. Sci. Math. Roumanie (N.S.), **50(98)** (2007), No. 3, 259–272
[5] Ekici, E., *On separated sets and connected spaces*, Demonstratio Math., **40** (2007), No. 1, 209–217
[6] El-Atik, A. A., *A study of some study of some types of mappings on topological spaces*, M. Sc. Thesis, Tanta University, 1997
[7] El-Atik, A. A., Abu Donia H. M. and Salama, A. S., *On b - connectedness and b - disconnectedness and their applications*, J. Egypt. Math. Soc., **21** (2013), 63–67
[8] Modak, S. and Noiri, T., *A weaker form of connectedness*, Communicated
[9] Mrsevic, M. and Andrijevic, D., *On θ - connectedness and θ - closure spaces*, Topology Appl., 123 (2002), No. 1, 157–166
[10] Noiri, T. and Modak, S., *Half b - connectedness in topological spaces*, communicated
[11] Velicko, N. V., *On the theory of H - closed topological spaces*, Sibirskii Math. Z., **8** (1967), 754–763; Siberian Math J., **8** (1967), 569–579

UNIVERSITY OF GOUR BANGA
DEPARTMENT OF MATHEMATICS
P.O. MOKDUMPUR, 732 103, MALDA, INDIA
E-mail address: spmodak2000@yahoo.co.in

2949-1 SHIOKITA-CHO
HINAGU, YATSUSHIRO-SHI
KUMOMOTO-KEN, 869-5142, JAPAN
E-mail address: t.noiri@nifty.com