

An approach to soft functions

Cigdem GUNDUZ ARAS ¹, Ayse SONMEZ ², Huseyin CAKALLI ³

¹ *Department of Mathematics, Kocaeli University, Kocaeli, Turkey*
E-mail: caras@kocaeli.edu.tr

² *Department of Mathematics, Gebze Institute of Technology, Kocaeli, Turkey*
E-mail: asonmez@gyte.edu.tr

³ *Department of Mathematics, Maltepe University, Maltepe, Turkey*
E-mail: huseyincakalli@maltepe.edu.tr

Abstract: In this paper, using a more appreciate definition of a soft point, i.e. a soft point is a soft set (F, E) such that for the element $e \in E$, $F(e) = \{x\}$ and $F(e') = \emptyset$ for all $e' \in E - \{e\}$, we present a new approach to soft functions in a interesting way, and introduce the concepts of soft continuous, soft open, soft closed, and soft homeomorphic functions in a very different way from the source existing in the literature. In the investigation we prove theorems related to these concepts and provide with examples, and counterexamples..

Keywords: soft set, soft point, soft continuity

2010 Mathematics Subject Classification: 54C05, 03E75

REFERENCES

- [1] Molodtsov, D., "Soft set theory first result", *Comp. and Math. with Appl.*, Vol. 37, pp.19-31, 1999.
- [2] Bayramov, B., Gunduz Aras, C., "Soft locally compact and paracompact spaces", *Journal of. Math. Sys. Science*, Vol.3, pp. 122-130, 2013.