Açıkgöz, Ahu; Çakallı, H.; Esenbel, Ferhat; Kočinac, Ljubiša D. R.
A quest of $G$-continuity in neutrosophic spaces. (English) [Zbl 07377097]

Summary: Continuity, in particular sequential continuity, is an important subject of investigation not only in topology but also in some other branches of mathematics. Connor and Grosse-Erdmann remodelled its definition for real functions by replacing lim with an arbitrary linear functional $G$ defined on a linear subspace of the vector space of all real sequences. Then, this definition was extended to a topological group $X$ by replacing a linear functional $G$ with an arbitrary additive function defined on a subgroup of the group of all $X$-valued sequences. Also, some new theorems in generalized setting were given, and some other theorems that had not been obtained for real functions were presented. In this study, we introduce neutrosophic $G$-continuity and investigate its properties in neutrosophic topological spaces.

MSC:
03E72 Theory of fuzzy sets, etc.
54A05 Topological spaces and generalizations (closure spaces, etc.)
54C10 Special maps on topological spaces (open, closed, perfect, etc.)
54D10 Lower separation axioms ($T_0$–$T_3$, etc.)
54D30 Compactness

Keywords:
neutrosophic group; neutrosophic $G$-sequential continuity; neutrosophic method; neutrosophic q-neighbourhood; neutrosophic quasi-coincidence; neutrosophic sequence; neutrosophic sequential closure

Full Text: DOI