Fuzzy congruences on AG-group

ABSTRACT

In this paper, we establish the idea of fuzzy congruences on Abel-Grassmann's group (AG-group). We investigate different outcomes of fuzzy-congruences on AG-groups in detail and give some examples to illustrate the newly established results. We develop the relation between fuzzy congruence and fuzzy normal subgroup. In the end, we also provide some results of fuzzy homomorphism on AG-groups.

Keyword: Fuzzy equivalence relation; Compatible; Congruence relation; AG-group; Fuzzy normal AG-group