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***L*-valued convex non-correlation structures.** (English) Zbl 1465.52007

J. Nonlinear Convex Anal. 21, No. 12, 2647-2658 (2020).

Summary: In this paper, we propose a concept of L-valued weakly independent system for characterizing L-fuzzifying convexity and show that there exists a one-to-one correspondence between them. By convex ideals, L-valued convex non-correlation structure is given for studying L-fuzzifying convexity. It follows from relationship between L-valued weakly independent systems and L-fuzzifying convexities that the category of L-valued convex non-correlation structures is isomorphic to the category of L-fuzzifying convex spaces.

MSC:

52A01 Axiomatic and generalized convexity
03E72 Theory of fuzzy sets, etc.
06A15 Galois correspondences, closure operators (in relation to ordered sets)

Keywords:

L-fuzzifying convexity; L-valued convex non-correlation structure; L-valued weakly independent system

Full Text: Link