

An Additive Decomposition of Fuzzy Numbers.

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Abstract: Hong and Do[4] improved Mareš[7] result about additive decomposition of fuzzy quantities concerning an equivalence relation. But there still exists an open question which is the limitation to fuzzy quantities on \mathbb{R} (the set of real numbers) with bounded supports in the presented theory. In this paper we restrict ourselves to fuzzy numbers, which are fuzzy quantities of the real line \mathbb{R} with convex, normalized and upper semicontinuous membership function and prove this open question.

Keywords: fuzzy number; fuzzy quantity; equivalence of fuzzy number;

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