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Triangular-norm-based addition of fuzzy intervals. (English) Zbl 0919.04011
Fuzzy Sets Syst. 91, No. 2, 231-237 (1997).

Summary: Triangular-norm-based addition of fuzzy intervals on the extended real line is reduced to the addition of shapes on $[0, \infty]$. The addition of fuzzy intervals, including LR -fuzzy intervals, LR -fuzzy numbers, LT - and TR -fuzzy numbers, based on limit t -norms is recalled. For continuous Archimedean t -norms, special types of incoming summands allowing the exact output computation are introduced. Several examples are given.

MSC:

03E72 Theory of fuzzy sets, etc.

Cited in **1** Review
Cited in **29** Documents

Keywords:

addition of fuzzy numbers; extension principle; triangular norm; fuzzy arithmetic; addition of fuzzy intervals; extended real line; addition of shapes; limit t -norms; Archimedean t -norms

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