

Goetschel, Roy jun.; Voxman, William

Elementary fuzzy calculus. (English) Zbl 0626.26014
Fuzzy Sets Syst. 18, 31-43 (1986).

An extension of the Hausdorff distance is used in definitions of limit properties of fuzzy valued functions. In particular, the derivative and the definite integral of such functions are obtained with properties modelled on real analysis. The paper explains some assumptions introduced by *D. Dubois* and *H. Prade* in their consideration of fuzzy differential calculus (cf. [Fuzzy sets and systems. Theory and applications. New York etc.: Academic Press (1980; Zbl 0444.94049), pp. 106–119].

Reviewer: [J.Drewniak](#)

MSC:

[26E50](#) Fuzzy real analysis
[03E72](#) Theory of fuzzy sets, etc.

Cited in **22** Reviews
Cited in **370** Documents

Keywords:

fuzzy number; fuzzy function; derivative; definite integral; fuzzy differential calculus

Full Text: [DOI](#)

References:

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