

Drossos, C. A.

Foundations of fuzzy sets: A nonstandard approach. (English) Zbl 0712.03045
Fuzzy Sets Syst. 37, No. 3, 287-307 (1990).

The paper deals with historical and philosophical aspects of vagueness. From new approaches to set-like concepts [e.g., *E. Nelson*, Bull. Am. Math. Soc. 83, 1165-1198 (1977; Zbl 0373.02040); *P. Vopěnka*, Mathematics in the alternative set theory (1979; Zbl 0499.03042)], the author prefers nonstandard analysis and its modifications. From this point of view he creates a mathematical theory of fuzzy sets as powers theory of Heyting algebras (what will be described in future publications).

Reviewer: [J.Drewniak](#)

MSC:

[03E72](#) Theory of fuzzy sets, etc.
[03H05](#) Nonstandard models in mathematics

Cited in **3** Reviews
Cited in **10** Documents

Keywords:

[fuzziness](#); [finiteness](#); [Boolean analysis](#); [infinitesimal analysis](#); [vagueness](#); [nonstandard analysis](#)

Full Text: [DOI](#)

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