عنوان مقاله:

Non-Newtonian Fuzzy numbers and \related applications

محل انتشار:

مجله سیستم های فازی, دوره 12, شماره 5 (سال: 1394)

تعداد صفحات اصل مقاله: 21

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خلاصه مقاله:

Although there are many excellent ways presenting the principle of the classical calculus, the novel presentations probably leads most naturally to the development of the non-Newtonian calculus. The important point to note is that the non-Newtonian calculus is a self-contained system independent of any other system of calculus. Since this self-contained work is intended for a wide audience, including engineers, scientists and mathematicians. The main purpose of the present paper is to construct of fuzzy numbers with respect to the non-Newtonian calculus and is to give the necessary and sufficient conditions according to the generalization of the notion of fuzzy numbers by using the generating functions. Also we introduce the concept of non-Newtonian fuzzy distance and give some properties regarding convergence of sequences and series of fuzzy numbers with some illustrative examples.

کلمات کلیدی:

Non-Newtonian calculus, Fuzzy level sets, Trapezoidal fuzzy numbers, Convergence of fuzzy sequences and series

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