Qahremani, E.; Allahviranloo, T.; Abbasbandy, Saeid; Ahmady, N.
An analytical method for solving second-order fuzzy differential equation. (English)
Zbl 1486.34006

Summary: This paper is devoted to obtaining an analytical solution for the second-order fuzzy differential equations by considering the type of generalized Hukuhara differentiability of the solution. The effectiveness and efficiency of the approaches are illustrated by solving several practical examples such as the fuzzy Cauchy-Euler equation, the fuzzy Legendre equation, and the fuzzy Chebyshev differential equation.

MSC:
34A07 Fuzzy ordinary differential equations

Keywords:
generalized Hukuhara differentiability; second-order fuzzy differential equation; fuzzy Cauchy-Euler equation; fuzzy Legendre equation; fuzzy Chebyshev differential equation

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