

A fractional multistep method for solving a class of linear fractional differential equations under uncertainty

ABSTRACT

The objective of this research has been devoted to solve linear fuzzy fractional differential equations (FFDEs) of the Caputo sense. The basic idea is to develop a fractional linear multistep method for solving linear FFDEs under fuzzy fractional generalized differentiability. For safely illustrating the advantages and potential of the presented method, a comparison with the fractional Euler method has to be analyzed in depth. We are interested in using a simple method to obtain gripping results.

Keyword: Fuzzy fractional differential equations (FFDEs); Fractional linear multistep method (FLMM)