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Abstract

In this paper, we present a method which is based on Bernoulli Collocation Method to give approximate solution of the Bagley-Torvik equation. The Bagley-Torvik equation is transformed into a system of algebraic equations by this method and this algebraic equations are solved through by assistance of Maple 2016. Further some numerical examples are given to illustrate and establish the accuracy and reliability of the proposed algorithm.

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Index Terms

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Keywords

Bagley-Torvik equation, fractional differential equation, Bernoulli Collocation, approximate solution.

