Zero-dissipative trigonometrically fitted hybrid method for numerical solution of oscillatory problems

ABSTRACT

In this paper, an improved trigonometrically fitted zero-dissipative explicit two-step hybrid method with fifth algebraic order is derived. The method is applied to several problems which solutions are oscillatory in nature. Numerical results obtained are compared with existing methods in the scientific literature. The comparison shows that the new method is more effective and efficient than the existing methods of the same order.