

**ON THE NEW TRAVELLING WAVE SOLUTIONS OF A NONLINEAR
CONFORMABLE TIME FRACTIONAL PDE VIA IBSEFM**

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ABSTRACT. In this study, we implement the Improved Bernoulli Sub-Equation Function Method (IBSEFM) to construct new travelling wave solutions of a nonlinear conformable time fractional partial differential equation arising in nonlinear optics. We successfully obtain the solutions and choosing some suitable values of parameters, we acquire the numerical simulation of all the obtained solutions. All the computations and graphics in this article are performed by the aid of mathematics software.

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