

A second solution to the Benjamin–Bona–Mahony equation

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Abstract

In this paper, I describe a second solution to the Benjamin–Bona–Mahony equation. The paper ends with “The End”

Introduction

The **Benjamin–Bona–Mahony equation** ^[1] is

$$\frac{\partial}{\partial t}u(x, t) + \frac{\partial}{\partial x}u(x, t) + u(x, t)\frac{\partial}{\partial x}u(x, t) - \frac{\partial}{\partial t}\frac{\partial}{\partial x}\frac{\partial}{\partial x}u(x, t) = 0$$

In a previous paper, I’ve described a solution to the Benjamin–Bona–Mahony equation.

In this paper, I describe a second solution to the Benjamin–Bona–Mahony equation.

A second solution to the Benjamin–Bona–Mahony equation

A second solution to the Benjamin–Bona–Mahony equation is

$$u(x, t) = \frac{a(x - t)}{1 + at}$$

References

[1] [https://en.wikipedia.org/wiki/Benjamin-Bona-Mahony equation](https://en.wikipedia.org/wiki/Benjamin-Bona-Mahony_equation)

The End