Two solutions to the general interaction of two masses

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Abstract

In this paper, I describe two solutions to the general interaction of two masses.
The paper ends with "The End"

Introduction

In this paper, I describe two solutions to the general interaction of two masses.

The general interaction of two masses

The general interaction of two masses is:

$$\frac{\partial M(t)}{\partial t} = K(t) + a(t)M(t) + c(t)m(t) + i(t)M(t)m(t)$$

$$\frac{\partial m(t)}{\partial t} = k(t) + b(t)M(t) + d(t)m(t) + j(t)M(t)m(t)$$

The first solution to the general interaction of two masses

$$M(t) = \frac{\sqrt{(-a(t)d(t) + b(t)c(t) - i(t)k(t) + j(t)K(t))^2 - 4(a(t)k(t) - b(t)K(t))(d(t)i(t) - c(t)j(t))} + a(t)d(t) - b(t)c(t) - i(t)k(t) + j(t)K(t)}{2b(t)i(t) - 2a(t)j(t)}$$

$$m(t) = \frac{\sqrt{(-a(t)d(t) + b(t)c(t) - i(t)k(t) + j(t)K(t))^2 - 4(a(t)k(t) - b(t)K(t))(d(t)i(t) - c(t)j(t))} + a(t)d(t) - b(t)c(t) + i(t)k(t) - j(t)K(t)}{2c(t)j(t) - 2d(t)i(t)}$$

The second solution to the general interaction of two masses

$$M(t) = \frac{\sqrt{(-a(t)d(t) + b(t)c(t) - i(t)k(t) + j(t)K(t))^2 - 4(a(t)k(t) - b(t)K(t))(d(t)i(t) - c(t)j(t))} - a(t)d(t) + b(t)c(t) + i(t)k(t) - j(t)K(t)}{2a(t)j(t) - 2b(t)i(t)}$$

$$m(t) = \frac{\sqrt{(-a(t)d(t) + b(t)c(t) - i(t)k(t) + j(t)K(t))^2 - 4(a(t)k(t) - b(t)K(t))(d(t)i(t) - c(t)j(t))} - a(t)d(t) + b(t)c(t) - i(t)k(t) + j(t)K(t)}{2d(t)i(t) - 2c(t)j(t)}$$

The End