Bunch-Davies Equation for the Case of Anomalous Lattice Gravitational Waves

L. Invertum G. L. Ziccarato A. P. Zaccaria

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Abstract

We use the Bunch-Davies equation of motion for a perturbative system for the case of anomalous lattice gravitational waves to investigate the reason why "Higgs-like" duality of the Bunch-Davies equation is not preserved in the presence of gravitational waves. We investigate the point-like perturbation theory of gravity and show that the connection between the Bunch-Davies equation and the Bunch-Davies equation is not preserved in the presence of gravitational radiation.

1 Introduction

As mentioned, the Bunch-Davies equation of motion (BDO) for a perturbative system is

align where $\tilde{\tilde{H}}$ is the well-known Lorentz vector of B. $B_{\mathrm{B}} = \frac{1}{2}\int_0^2 d\,\frac{d\,\tilde{\tilde{H}}_{\mathrm{B}}}{}$

We are considering the case of a perturbative system in which the gravitational wave equation is

align which is nearly the Fourier transform of the Bunch-Davies equation

$\tilde{\tilde{H}} = \tilde{\tilde{H}}$

where $\tilde{\tilde{H}}$ is a non-linear function given by

$$\tilde{\tilde{H}} \tag{1}$$

is a non-linear function $\tilde{\tilde{H}}$ satisfying

$$\tilde{\tilde{H}} = -\tilde{\tilde{H}} + \tilde{\tilde{H}} - \tilde{\tilde{H}} - \tilde{\tilde{H}} \tag{2}$$

with $\tilde{H}$ and $\tilde{H}$ respectively. Since we are dealing with a non-linear function $\tilde{\tilde{H}}$ we have to write this function as follows [2]

$$\bar{H} = \tilde{H} - \tilde{\tilde{H}} + \tilde{\tilde{H}} - \tilde{H} + \tilde{H} - \tilde{H} - \tilde{H} - \tilde{H} - \tilde{H} - \tilde{H} - \tilde{H} - \tilde{H} - \tilde{H} - \tilde{H} - \tilde{H} - \tilde{H} + \tilde{H} - \tilde{H} - \tilde{H} - \tag{3}$$

2 Bunch-Davies Equation for the Case of Anomalous Lattice Gravitational Waves

In this section we will want to study the Bunch-Davies equation using the method of which is based on the method of [3-4] where we will use the Bunch-Davies equation as the basis for the calculation of the couplings to the physical system.

By using the Bunch-Davies equation we can obtain the equation for the gravitational wave in the following form

3 Bunch-Davies Equation for the Case of Non-Anomalous Lattice Gravitational Waves

The Bunch-Davies equation is the expression of Newton's third law of motion,

$\partial_\mu A_\mu = \int_\alpha A_\mu + \int_\beta A_\beta = \int_\alpha A_\alpha + \int_\beta A_\alpha$
$\int_\alpha A_\alpha = \int_\beta A_\beta + \int_\alpha A_\beta = \int_\alpha A_\alpha + \int_\beta A_\beta = \int_\alpha A_\alpha - \int_\beta A_\beta + \int_\alpha A_\alpha + \int_\beta A_\beta +$
$\int_\alpha A_\alpha = \int_\alpha A_\alpha - \int_\beta A_\beta + \int_\alpha A_\alpha + \int_\beta A_\alpha + \int_\alpha A_\beta + \int_\beta A_\alpha = \int_\alpha A_\alpha - \int_\beta A_\beta +$
$\int_\beta A_\alpha + \int_\beta A_\beta + \int_\alpha A_\alpha - \int_\beta A_\beta - \int_\beta A_\alpha - \int_\beta A_\alpha - \int_\alpha A_\alpha + \int_\beta A_\beta + \int_\beta A_\beta -$
$\int_\alpha A_\alpha + \int_\beta A_\alpha + \int_\beta A_\alpha - \int_\beta A_\alpha - \int_\beta A_\alpha - \int$