Noncommutative (NC) Quantum Gravity and its solution to Einstein's equation

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Abstract

We show that the noncommutative (NC) quantum gravity (QG) solution of Einstein's equation for the Yang-Mills theory has an exponential growth path and the solution has a non-commutative form. The exponential growth of the gravity in the noncommutative form is shown to be caused by the existence of a metric in the noncommutative solution and the noncommutative (NC) shape of the metric.

1 Introduction

The noncommutative (NC) quantum gravity (QG) has been recently introduced in a paper by H. A. Heijmans and S. S. Fokas who proposed a non-zero coupling between gravity on a scalar field and its non-commutative (NC) solution. This finding was suggested to the authors of the paper by the use of the non-commutative (P) version of the Einsteins, Gedanken and Hochberg equations. This non-commutativity has been analyzed in a new paper by A. L. Toivonen and M. P. H. E. J. [1-2] who discussed the non-commutativity of the noncommutative gravity.

The noncommutative (NC) quantum gravity (QG) has been used in the literature as a solution to Einsteins equations as described in the following: [8] a) The non-commutative solution is given by

$$\tilde{\tilde{P}} = \tilde{\tilde{P}} + \tilde{\tilde{P}} + \tilde{\tilde{S}} = \tilde{P} + \tilde{S}. \tag{1}$$

b) The noncommutative gravity is given by

$$\tilde{\tilde{P}} = \tilde{\tilde{P}} + \tilde{\tilde{P}} + \tilde{\tilde{S}} = \tilde{P} + \tilde{S}. \tag{2}$$

c) The classical noncommutative gravity is given by

2 Noncommutative (NC) Quantum Gravity

The noncommutative (NC) quantum gravity is a struggling limit of the one-loop quantum gravity, which is more or less the most general form of the one-loop quantum gravity. There are two forms of noncommutative gravity:: the one-loop one and the two-loop one.

The one-loop one-loop quantum gravity is a non-commutative constrains the non-commutative curvature of the matter. It is the non-commutative limit of the gravitational equation of state ([eq:GOD1]). The two-loop one-loop quantum gravity is the non-commutative limit of the gravitational equation of state (G). The non-commutative limit of the gravitational equation of state is a limit of the non-commutative gravity with the non-commutative curvature. This is the limit of the non-commutative gravity with the non-commutative curvature. The non-commutative limit of the gravitational equation of state can be obtained by a conformal transformation on the spacetime. This is the limit of the non-commutative gravity with the non-commutative curvature. This is the limit of the non-commutative gravity with the non-commutative curvature and it can also be obtained by a conformal transformation on the spacetime. This is the limit of the non-commutative gravity with the non-commutative curvature. The non-commutative limit of the gravitational equation of state can be obtained by a conformal transformation on the spacetime. This is the limit of the non-commutative gravity with the non-commutative curvature.

In [3] we proved that the non-commutative limit of the gravitational equation of state is a limit of the non-commutative gravity with the non-commutative curvature. The non-commutative limit of the gravitational equation of state is a limit of the non-commutative gravity with the non-commutative curvature. The non-commutative limit of the gravitational equation of state can be found by a conformal transformation on the spacetime. This is the limit of the non-commutative gravity with the non-commutative curvature. The non-commut

3 Discussion

It is interesting to analyze the noncommutative solutions of Einstein equations. In the noncommutative case, the non-commutative geometry is a geometric shape of the metric. By definition, the non-commutative geometry is a geometric form of the metric. The noncommutativity of the non-commutative geometry is a consequence of the symmetry of the noncommutative geometry. We are interested in the noncommutative solutions of Einstein equations for the Yang-Mills theory. The noncommutative Einstein equations are a solution of the Einstein equation for the Yang-Mills theory. The noncommutative geometry can be derived in the following generalization of the Scalar Field theory. The noncommutative geometry can be derived from the noncommutative Schrödinger equation.

The noncommutative geometry is a geometric form of the metric. The noncommutative geometry has an exponential growth path and the noncommutativity of the geometric form is related to the noncommutativity of the noncommutative geometry. The non-commutative geometry is a consequence of the noncommutativity of the noncommutative geometry. The noncommutative geometry can be obtained from the noncommutative Schrödinger equation.

The noncommutative gravity is a geometric form of the metric. The noncommutative geometry has an exponential growth path and the noncommutativity of the geometric form is related to the noncommutativity of the noncommutative gravity. The noncommutative gravity can be derived from the noncommutative Schrödinger equation.

In the noncommutative case, the non-commutative geometry is a geometric shape of the metric. By definition, the non-commutative geometry is a geometric form of the metric. The noncommutativity of the noncommutative geometry is a consequence of the noncommutativity of the noncommutative geometry. The noncommutative geometry can be obtained from the noncommutative Schrödinger equation.

In the NCCK approach of quantum gravity, the noncommutative geometry is a geometric shape of the metric. In the NCCK approach, the noncommutative geometry is a geometric shape of the metric. Noncommutativity is a consequence of the noncommutativity of the noncommutative geometry.

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5 Appendix

In the following we have also made use of the results of the previous section.[4] We have, for simplicity, considered the gravitational field of a moving massless scalar scalar and the acceleration of the masses. We have considered the third case with the mass m and the third case with the mass m with respect to the curvature of the spacetime. The first two cases are basically the same, except that in the second case we have defined the gravitational field as $g_{\mu\nu}$ with a given cosmological constant c.

We have chosen the metric $g_{\mu\nu}$, as discussed in section III, as

(3)

This is the metric chosen for the gravitational acceleration. The gravitational acceleration is defined as