

The noncommutativity of the black holes

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Abstract

We study the noncommutativity of the black hole horizon in the presence of a scalar field. For the Higgs sector, such a noncommutativity is visible to us, and it is shown that it is a constant, not an operator. We also show that the black hole horizon becomes a noncommutative black hole and we compute the mass and spin of the black hole.

1 Introduction

The noncommutativity of the black hole horizon in the conditions of a quantum electrodynamics (QED) model is a natural result in the light-like approximation, the one-loop superextension, where the noncommutativity of the black hole horizon is fixed by the quantum electrodynamics. To this end, we have studied the noncommutativity of the horizon from a quantum electrodynamics (QED) perspective, and we have obtained the mass and spin of the Higgs sector. We have computed the mass of the black hole horizon from a noncommutative point of view.

We have investigated the noncommutativity of the horizon from a quantum electrodynamics (QED) perspective. We have shown that it is a constant, not an operator, and that it is a constant, not an operator,¹. We have also computed the mass and spin of the Higgs sector in the presence of a scalar field.

In the context of quantum electrodynamics (QED), one of the most important considerations is the noncommutativity of the Higgs sector. The noncommutativity of the horizon is one of the most useful aspects of the

QED model, as it is able to give a priori, a better approximation, the masses of the Higgs sector (which has the same mass as the scalar field) and the spin of the Higgs sector,2 where

$$\omega_{-1}, \omega_{-2}, \omega_{-3}, \omega_{-4}, \omega_{-5}, \omega_{-6}\omega_{-7}, \omega_{-8}, \omega_{-9}\omega_{-10}\omega_{-11}\omega_{-12}\omega_{-13} \quad (1)$$

The fundamentals of the theory are not so easily understood by means of the classical methods; the standard method of classifying the quantum states by means of the classical methods is not available for the case of the Higgs system. Therefore, one should look for the classical method of classifying quantum states in the standard way, which is based on the algebraic approach[1]. One can use the classical method of classifying quantum states in the standard way, which is based on the algebraic approach, to analyse the quantum states of the Higgs system in the Higgs sector, where the Higgs field is a particle with its mass M . A state of the Higgs system with its mass M can be analysed by using the algebraic approach, using the standard method of classifying quantum states in the standard way. In this paper we are interested in the quantum states of the Higgs system in the Higgs sector, where the Higgs field is a particle with its mass M . The quantum states of the Higgs system are state space independent, and can be analysed by using the algebraic approach. The algebraic approach of classifying quantum states follows from the following theorem. The algebraic approach to classifying quantum states is equivalent to the classical method when one looks for the classical method of classifying quantum states in the standard way (see also the general theorem).

The algebraic approach to classifying quantum states is based on the algebraic approach of classifying classical states in the standard way. The algebraic approach is based on the algebraic approach of classifying classical states in the standard way. The algebraic approach is based on the algebraic approach of classifying classical states in the standard way. The algebraic approach of classifying quantum states is based on the algebraic approach of classifying quantum states in the standard way.

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The algebraic approach to classifying

2 Higgs field in the above-mentioned scalar field

If one wishes to derive the Higgs field for the above-mentioned sector, one may begin by constructing the above-mentioned matrix of coordinates. The matrix of coordinates used is

3 Mass and spin of the Higgs sector

We first consider the mass of the Higgs sector and the spin of the Higgs vector. The mass and spin of the Higgs sector can be obtained from the vector ψ and \hbar in Eq.([EQ0]) and the relation Eq.([EQ0]) with respect to the Higgs vector \hbar is given by the following expression:

$$mN_2 = m^2 - m^3 - m^4m^2 - m^5m^2 - m^6m^2$$

The mass with respect to the Higgs vector \hbar and the mass m^2 is given in Eq.([EQ0]) in Eq.([EQ0]) and is conserved under a conservation of the mass m^2/m^2 . The mass m^2 is the real part of the mass m^2 and the mass m^2 is the imaginary part of the mass m^2 . The mass m^2 is the real part of the mass m^2 and the mass m^2 is the imaginary part of the mass m^2 .

Note that in Eq.([EQ0]) for the Higgs sector, \hbar is the Hilbert space of the first rank quantum field theory with respect to the Higgs vector \hbar . The mass can be calculated from the vector ψ and

4 Computations with the mass gap

Since we can define the mass gap, we can compute the mass of the Higgs sector. If we assume that the mass is constant, then the mass gap can be computed as

$$M_{H_0} = M_0. \tag{2}$$