

# A change in the noncommutativity of the Higgs mechanism

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## Abstract

A change in the noncommutativity of the Higgs mechanism is introduced. The change in the noncommutativity of the Higgs mechanism is achieved by adding a line of motion at the Higgs scale. Such motion is described by a single vector field, the line of motion of a classical Higgs field, and the motion of a non-commutative Higgs field. We develop this idea and verify that the line of motion of a non-commutative Higgs field is actually noncommutative.

## 1 Introduction

A change in the noncommutativity of the Higgs mechanism is an interesting idea, which may be able to explain the non-Zitternde Elektron. In this paper we show that the Higgs mechanism works by adding a line of motion at the Higgs scale. Such motion is described by a classical Higgs field and a noncommutative Higgs field. The noncommutativity of the Higgs mechanism is the result of this addition. Therefore, the Higgs mechanism may be a natural source of non-Zitternde Elektron. This idea is a generalization of the one from [1] where the addition of a new non-commutative Higgs field at the Higgs scale is shown to have the same behaviour as the one with the non-commutative Higgs field. The noncommutativity of the Higgs mechanism is an interesting idea, which may be able to explain the non-Zitternde Elektron. In this paper we show that the Higgs mechanism works by adding a line of motion at the Higgs scale. Such motion is described by a classical Higgs field and a noncommutative Higgs field. The noncommutativity of the Higgs

mechanism is the result of this addition. Therefore, the Higgs mechanism may be a natural source of non-Zitternde Elektron. This idea is a generalization of the one from [2] where the addition of a new non-commutative Higgs field at the Higgs scale is shown to have the same behaviour as the one with the non-commutative Higgs field. The noncommutativity of the Higgs mechanism is an interesting idea which may give us a natural explanation for the non-Zitterde Elektron. This idea is a generalization of the one from [3] where the addition of a new non-commutative Higgs field at the Higgs scale is shown to have the same behaviour as the one with the non-commutative Higgs field. The noncommutativity of the Higgs mechanism is an interesting idea which may give us a natural explanation for the non-Zitterde Elektron. This idea is a generalization of the one from [4] where the addition of a new non-commutative Higgs field at the Higgs scale is shown to have the same behaviour as the one with the non-commutative Higgs field. The noncommutativity idea which may give us a natural explanation for the non-Zitterde Elektron. This idea is a generalization of the one from [5] where the addition of a new non-commutative Higgs field at the Higgs scale is shown to have the same behaviour as the one with the non-commutative Higgs field. In the Zitterde Elektron it is easily seen that the addition of a new non-commutative Higgs field to the Higgs mechanism is equivalent to the one with the non-commutative Higgs field. And to understand this we have to remember that in the case of the non-commutative Higgs field the causality break in the four dimensions is only in the sense that it is a property of the non-commutative Higgs field, i.e. the causal break does not depend on the non-commutativity of the Higgs field. This means that the non-commutativity of the Higgs mechanism is not the only one which may give us a natural explanation for the non-Zitterde Elektron. This idea is not yet well understood in the standard string theory and is also not well understood in the non-Zitterministic string models. In the Zitterdile we show that this idea is not a natural one, that the causal break in the four dimensions is not a property of the non-commutative Higgs field, but is instead an intrinsic property of the non-commutative Higgs field. This is a modification of the Zitterdile idea which was first proposed in [6].

The calculation of the masses in the Zitterdile is straightforward. Let us now discuss the bounds of the non-commutative Higgs theory. This is done in the following. A simple function  $\phi$  is introduced which is valid for all mass scales. For small mass scales the non-commutative Higgs theory has no bounds. For large mass scales we can introduce a function  $M_\mu, M_\nu$  which is

valid for all mass scales. For small mass scales the non-commutative Higgs theory has no bounds. For large mass scales we can introduce a function  $M$ ,

## 2 Line of Motion

We now consider a rotation of the vector field. The vector field is a function of the Higgs scale, the noncommutative Higgs field and its non-commutative counterpart, the commutative Higgs field. The vector field is given by

$$=$$
$$=$$

for the  $n$ -th order,

## 3 The Noncommutative Higgs Field

Once again we would like to stress that we are not trying to replace the classical Higgs mechanism with a noncommutative one. This idea is a result of an attempt at a reduction of the classical Higgs mechanism to a noncommutative one. A main goal of the present work is to prove the noncommutativity of the Higgs mechanism in the noncommutative framework. Therefore, we would like to discuss a change of the noncommutativity of the Higgs mechanism.

It is well-known that the noncommutativity of the Higgs mechanism is not a trivial problem. In fact, the notion of the noncommutativity of the Higgs mechanism was introduced in the context of quantum field theory by the efforts of S. G. Hoffmann and A. L. Zabriskie, [7] who proposed the following noncommutativity:

The noncommutativity of the Higgs mechanism is not the only non-trivial problem in the noncommutative context.

The key to a reduction of the classical Higgs mechanism to a noncommutative one is to introduce a non-commuting vector field, the line of motion of a classical Higgs field. This is achieved by introducing a line of motion at the Higgs scale, and the motion of the non-commutative Higgs field is described by a non-commutative Higgs field. The non-commutative Higgs field is a vector field. It is a vector field in the non-commutative regime, and the non-commutative Higgs field has to be a vector field. The non-commutative Higgs field, as a vector field, has a non-trivial physical interpretation in the noncommutative regime. Although the classical Higgs mechanism is not the only non-commutative one in the noncommutative regime, it is an efficient one for the classical Higgs field through the noncommutative-commutative dynamics. We are going to show that the non-commutative Higgs mechanism is a good candidate for the non-commutative-commutative dynamics.

In the present paper we will introduce the noncommutative Higgs mechanism for the classical Higgs field, and justify this mechanism by the non-commutative Higgs background.

In this paper we will show that the non-commutative Higgs mechanism is a good candidate for the non-commutative-commutative dynamics of the classical Higgs mechanism. This mechanism is a generalization of the non-commutative Higgs mechanism for the classical Higgs field. It is a most general mechanism for explaining the non-commutativity of the classical Higgs mechanism.

We will also show that the non-commutative Higgs model can be modified in a non-commutative manner by changing the non-commutative Higgs field. Such a modification is implemented in the most general formalism for the non-commutative Higgs mechanics, currently being developed.

In this paper we will see that the non-commutative Higgs mechanism is not the only non-commutative one in the noncommutative regime. We will also show that the non-commutativity of the non-commutativity of the Higgs mechanism is not the only non-commutative one in the noncommutative regime. However, we will show that the non-commutativity of the non-commutativity of the Higgs mechanism is not the only non-commutative one in the noncommutative regime. This mechanism may be a general generalization of the non-commutative Higgs mechanism for the non-commutative Higgs field. This mechanism may be modified in a non-commutative

## 4 The Noncommutative Higgs Model

The noncommutative Higgs field is the one of a vector field with the following coefficients

$$1$$

$$l_s, l'_s = -1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13[l_s, l'_s - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13]$$

In the previous section, we introduced a new vector field <sup>2</sup> with parameters  $l_s, l'_s$

$$\equiv \circ_s \int_0^\infty l^2 \equiv \cos$$

in the broad range  $s$  and  $s' s = \infty$  with parameters  $s^\infty, s = 0$

$$\equiv \circ_s \int_0^\infty l^2 \equiv \cos \tag{1}$$

## 5 Summary and discussion

The addition of a noncommutative theory to the standard model of the Standard Model of Cosmology and the Standard Model of Noncommutative Quantum Field Theory is considered in this paper. Different kinds of noncommutative theories are considered in this paper, e.g. ordinary classical quantum field theories, ordinary noncommutative quantum field theories, noncommutative quantum field theories with a charge  $-1$ , noncommutative quantum quantum field theories with a charge  $-1$  with a noncommutative theory. The noncommutativity of the Higgs mechanism is introduced, it is shown that it is the causality of the noncommutative theories, and that there is a direct correlation between the noncommutativity of the Higgs mechanism and the noncommutativity of the classical quantum field theory.

The Higgs mechanism is the direct product of a noncommutative theory with a potential and a noncommutativity of the Higgs field. A noncommutative theory is a product of a noncommutative theory with a noncommutativity of the Higgs field. The Higgs field is the classical quantum field theory with an ordinary classical charge  $-1$  with the ordinary classical charge  $-1$ . In the noncommutative case, the Higgs field is the classical quantum field

theory with a noncommutativity of the Higgs field. The noncommutativity of the Higgs mechanism is related to the noncommutativity of the classical quantum field theory. In the noncommutative case, the Higgs field has a non-zero mass. The Higgs field in the noncommutative case is obtained by adding to the classical quantum field theory the Higgs field and the noncommutativity of the Higgs field.

The Higgs mechanism can be realized by adding a potential, a noncommutative one, to the classical quantum field theory. The noncommutativity of the potential is related to the noncommutativity of the classical quantum field theory. It is possible to obtain a noncommutative classical quantum field theory in the noncommutative case. The noncommutativity of the Higgs field is related to the noncommutativity of the classical quantum field theory. In the noncommutative case, the Higgs field is a scalar field. The noncommutativity of the Higgs field is the non-zero mass of the Higgs field.

In this paper, we aim to present the non-commutative formulation of the Higgs mechanism. The noncommutative formulation of the Higgs mechanism is at the core of our approach, as it offers a direct communication between noncommutative theories and the commutative theories, and it opens up a new class of solutions of classical quantum field theories. In the noncommutative case, the Higgs field is a weakly coupled field theory. The Higgs field in the noncommutative case is a covariant partial derivative with respect to the operator  $(\hbar, rho)$ .

We consider the Higgs mechanism as a classical quantum field theory with a noncommutativity of the Higgs field. The noncommutativity of the Higgs field is the non-zero mass of the Higgs field. The noncommutativity of the Higgs field can be obtained by adding to the classical quantum field theory the Higgs field and the noncommutativity of the Higgs field. This approach is analogous to the classical quantum field theory with a non-commutativity of the Higgs field. As the non-commutativity of the Higgs field is related to the noncommutativity of the classical quantum field theory, we can obtain a noncommutative classical quantum field theory in the noncommutative case. In the noncommutative case, the Higgs field has a non-zero mass. The Higgs field in the noncommutative case is a covariant partial derivative with respect to the operator  $(\hbar, rho)$ .

We now wish to have a rigorous discussion of the noncommutative Higgs mechanism in the context of the non-commutative field theory. This is achieved by adding to

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