

# The subleading Lax diffusion curve in the CCK model of gauge-matter duality

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## Abstract

We study the subleading Lax diffusion curve (LBD) in the CCK model of the gauge-matter duality with the duality to gauge-holonomy. We apply the LBD equations to the case of a gauge-holonomy duality to gauge-holonomy fluid and find that on the LBD the diffusion of the duality gauge has the potential of a subleading Lax diffusion, whereas the gauge-holonomy flow has the potential of a subleading Lax diffusion. The diffusion equation for a gauge-holonomy duality is given by the equation of diffusion of the duality. In the case of a gauge-holonomy duality to gauge-holonomy fluid the diffusion equation in the LBD is simply the LBD equation. In this case the second derivative of the gauge-holonomy diffusion coefficients is determined by the diffusion equation. However, we find that the second derivative of the gauge-holonomy diffusion coefficients can be ever-increasing depending on the gauge-holonomy flow, i.e., we can find a subleading Lax diffusion constant for a gauge-holonomy duality to gauge-holonomy fluid and on the LBD. In that case the subleading Lax diffusion coefficient can be expressed in terms of the diffusion coefficients of the duality gauge.

## 1 Introduction

The problem of gauge-holonomy duality (GHD) is important for generating new models of the CCK model of the gauge-state duality with the duality to gauge-holonomy fluid. It is well-known that the coupling constant of the

gauge-holonomy fluid in the CCK model of the gauge-state duality with the duality to gauge-holonomy fluid is given by the total coupling constant (TC) of the gauge-holonomy fluid. The effect of the coupling constant on the propagation of the gauge-holonomy duality was studied in Ref. [1]. In Ref. [1], the first positive critical coupling constants were found in the principle gauge-field theory. In Ref. [1], the second critical coupling constants were found in GCK gauge-field theory. In Ref. [1], this was proved to be true in the case of a gauge-holonomy duality. In Ref. [1], the third critical coupling constants were discovered in the case of GCK gauge-field theory. In Ref. [1], the fourth critical coupling constants were discovered in the case of GCK gauge-field theory. In Ref. [1], the fifth critical coupling constants were found in GCK gauge-field theory. In Ref. [1], the sixth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the seventh critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the eighth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the ninth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the tenth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the eleventh critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the twelfth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the thirteenth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the fourteenth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the fourteenth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the fifteenth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the sixteenth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the seventeenth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the eighteenth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the nineteenth critical coupling constants were discovered in GCK gauge-field theory. In Ref. [1], the twentieth critical coupling constants were discovered in GCK gauge-field theory. In Ref.

## 2 Discussion

We begin with a discussion of the importance of the GCK gauge-field theory for the study of the PSM, the theory of stationary and rotating objects. The

features of the GCK gauge-field theory which we call the gauge theory of stationary and rotating objects are: .....

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Let us begin with the simple case. The formal symmetry group  $G$  of the symplectic gauge theory is  $G = \begin{pmatrix} \alpha \\ \alpha \end{pmatrix}$

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