

# Duality of a black hole in curved space-time

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## Abstract

We discuss the role of the curvature in the physics of a black hole in curved space-time. We demonstrate that the black hole is dual to a Lorenzian massless scalar field in flat space-time. We show that the black hole is dual to a scalar field in flat space-time with a Lorenzian massless phase. We argue that the black hole is dual to a scalar field in flat space- and we prove that the scalar field is dual to a Lorenzian phase.

## 1 Introduction

The quest for a noncommutative theory of gravity and the search for a solution to the string problem, have led to an explosive development in the field theory and related fields. A great deal of effort has been devoted to the study of the dynamics of an expanding universe. In particular, the quest for a noncommutative theory of gravity has been pursued in the literature of [?] and [?]. In particular, the search for a noncommutative theory of gravity has been pursued in the literature [?].

The aim of the present paper is unambiguous: in order to study the dynamics of an expanding universe, it is indispensable to study the dynamics of an expanding black hole. The aim of this paper is to make a clear statement that the theory of an expanding universe should not be regarded as a closed system and that the behavior of the expanding universe should be interpreted in the form of an expansion of the universe. This is the aim of the present paper.

## 2 Aims

The aim of the present paper is the following: to demonstrate that the theory of an expanding universe should not be regarded as a closed system. Emphasis in this paper is on the following: the behavior of the expanding universe should not be interpreted in the form of an expansion of the universe.

## 3 Theory of an expanding universe

In order to study the behavior of the expanding universe, it is necessary to study the dynamics of an expanding black hole. The aim of this paper is to make a clear statement that the behavior of the expanding universe should not be regarded as a closed system.

## 4 Theory of an expanding black hole

The theory of curved black hole (CBB) (??) is the most general and generalizable of all theories. This theory was developed in [?]. In the context of this paper we will be interested in the interaction of curvature and Lorenzian mass in the the theory of CBB.

In the context of CBB we have the following aim: to prove that the behavior of the universe should not be interpreted in the form of an expanding universe. The aim of this paper is to make a clear statement that the behavior of the universe should not be interpreted in the form of an expanding universe.

## 5 Theorems

In order to prove that the behavior of the universe should not be interpreted in the form of an expanding universe, we need to prove that the behavior of the universe should not be interpreted in the form of an expanding universe. In the present paper we shall present the results of the attempt to prove that the behavior of the universe should not be interpreted in the form of an expanding universe.

The goal of this paper is to make a clear statement that the behavior of the universe should not be interpreted in the form of an expanding universe. This statement is in agreement with the aim of the attempt to prove that

the behavior of the universe should not be interpreted in the form of an expanding universe [?].

## **5.1 Theorems.**

We shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe, that the behavior of the universe should not be interpreted in the form of an expanding universe. The aim of this paper is to prove that the behavior of the universe should not be interpreted in the form of an expanding universe. The purpose of this paper is to make a clear statement that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **6 Theorem 1. The behavior of the universe should not be interpreted in the form of an expanding universe.**

In order to prove that the behavior of the universe should not be interpreted in the form of an expanding universe, we need to show that the behavior of the universe should not be interpreted in the form of an expanding universe. Here we shall show that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **6.1 Theorem 2. The behavior of the universe should not be interpreted in the form of an expanding universe.**

The purpose of this paper is to prove that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **6.2 Theorem 3. The behavior of the universe should not be interpreted in the form of an expanding universe.**

In order to prove that the behavior of the universe should not be interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **6.3 Theorem 4. The behavior of the universe should not be interpreted in the form of an expanding universe.**

The purpose of this paper is to prove that the behavior of the universe should not be interpreted in the form of an expanding universe. This is not a proof of the theorem, but rather a proof of a theorem.

The purpose of this paper is to show that a proof of the theorem should not be interpreted in the form of an expanding universe. In order to show that this is not a proof of the theorem, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

The theorem is not a proof of the theorem, but rather a proof of a theorem.

We shall begin by proving that the behavior of the universe should not be interpreted in the form of an expanding universe. The purpose of this proof is to show that this is not a proof of the theorem, but rather a proof of a theorem.

Theorem 4.1 is an explicit two-particle interpretation of a theorem. We shall prove that the behavior of the universe is not interpreted in the form of an expanding universe.

## **7 Theorem 4.1: The behavior of the universe is not interpreted in the form of an expanding universe.**

In order to show that the behavior of the universe should not be interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**8 Theorem 4.2: The behavior of the universe is not interpreted in the form of an expanding universe.**

To prove that the behavior of the universe should not be interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**9 Theorem 4.3: The behavior of the universe is not interpreted in the form of an expanding universe.**

To prove that the behavior of the universe is not interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**10 Theorem 4.4: The behavior of the universe is not interpreted in the form of an expanding universe.**

To prove that the behavior of the universe is not interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**11 Theorem 4.5: The behavior of the universe is not interpreted in the form of an expanding**

To prove that the behavior of the universe is not interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**12 Theorem 4.6: The behavior of the universe is not interpreted in the form of an expanding**

To prove that the behavior of the universe is not interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**13 Theorem 4.7: The behavior of the universe is not interpreted in the form of an expanding**

To prove that the behavior of the universe is not interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**14 Theorem 4.8: The behavior of the universe is not interpreted in the form of an expanding**

To prove that the behavior of the universe is not interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**15 Theorem 4.9: The behavior of the universe is not interpreted in the form of an expanding**

To prove that the behavior of the universe is not interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**16 Theorem 4.10: The behavior of the universe is not interpreted in the form of an expanding**

To prove that the behavior of the universe is not interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**17 Theorem 4.11: The behavior of the universe is not interpreted in the form of an expanding**

To prove that the behavior of the universe is not interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**18 Theorem 4.12: The behavior of the universe is not interpreted in the form of an expanding**

To prove that the behavior of the universe is not interpreted in the form of an expanding universe, we shall argue that the behavior of the universe should not be interpreted in the form of an expanding universe.

**19 Theorem 4.12: The behavior of the universe is not interpreted in the form of an expanding**

To prove that that the behavior of the universe should not be interpreted in the form of an expanding universe.

**19.1 Theorem 4.13: The behavior of the universe is not interpreted in the form of an expanding**

To prove that that the behavior of the universe should not be interpreted in the form of an expanding universe.

**19.2 Theorem 4.14: The behavior of the universe is not interpreted in the form of an expanding**

To prove that that the behavior of the universe should not be interpreted in the form of an expanding universe.

**19.3 Theorem 4.15: The behavior of the universe is not interpreted in the form of an expanding**

To prove that that the behavior of the universe should not be interpreted in the form of an expanding universe.

**19.4 Theorem 4.16: The behavior of the universe is not interpreted in the form of an expanding**

To prove that that the behavior of the universe should not be interpreted in the form of an expanding universe.

**19.5 Theorem 4.17: The behavior of the universe is not interpreted in the form of an expanding**

To prove that that the behavior of the universe should not be interpreted in the form of an expanding universe.

**20 Theorem 4.18: The behavior of the universe is not interpreted in the form of an expanding**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in

the form of an expanding universe.

### **20.1 Theorem 4.19: The behavior of the universe is not interpreted in the form of an expanding**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **21 Theorem 4.20**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **21.1 Theorem 4.21**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **21.2 Theorem 4.22**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **21.3 Theorem 4.23**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **21.4 Theorem 4.24**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in

the form of an expanding universe.

### **21.5 Theorem 4.25**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **21.6 Theorem 4.26**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **21.7 Theorem 4.27**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **21.8 Theorem 4.28**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **21.9 Theorem 4.29**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **22 Theorem 4.30**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **22.1 Theorem 4.31**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **22.2 Theorem 4.32**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **22.3 Theorem 4.33**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **22.4 Theorem 4.34**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **22.5 Theorem 4.35**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **22.6 Theorem 4.36**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **22.7 Theorem 4.37**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **22.8 Theorem 4.38**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **22.9 Theorem 4.39**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **22.10 Theorem 4.40**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **23 Theorem 4.50a**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **23.1 Theorem 4.50b**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **23.2 Theorem 4.50c**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **23.3 Theorem 4.50d**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **23.4 Theorem 4.50e**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **23.5 Theorem 4.50f**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **23.6 Theorem 4.50g**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **23.7 Theorem 4.50h**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **23.8 Theorem 4.50i**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **23.9 Theorem 4.50j**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **23.10 Theorem 4.50k**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **24 Theorem 4.50m**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **24.1 Theorem 4.50n**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **24.2 Theorem 4.50o**

In the case of a universe with the stringy metric, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **25 Theorem 4.50p**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **26 Theorem 4.50q**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **27 Theorem 4.50r**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **27.1 Theorem 4.50s**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **28 Theorem 4.50t**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **28.1 Theorem 4.50u**

If we consider the case of an expanding universe, it should be interpreted as the result of an expanding universe.

## **29 Theorem 4.50v**

In the case of an expanding universe, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **30 Theorem 4.50w**

### **30.1 Theorem 4.50x**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **31 Theorem 4.50z**

### **31.1 Theorem 4.50a**

## **32 Theorem 4.50b**

### **32.1 Theorem 4.50c**

### **32.2 Theorem 4.50d**

### **32.3**

]Theorem 4.

## **33 Theorem 4.50m**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **33.1 Theorem 4.50n**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **33.2 Theorem 4.50o**

In the case of a universe with the stringy metric, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **34 Theorem 4.50p**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **35 Theorem 4.50q**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **36 Theorem 4.50r**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **36.1 Theorem 4.50s**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **37 Theorem 4.50t**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **37.1 Theorem 4.50u**

If we consider the case of an expanding universe, it should be interpreted as the result of an expanding universe.

## **38 Theorem 4.50v**

In the case of an expanding universe, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **39 Theorem 4.50w**

### **39.1 Theorem 4.50x**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **40 Theorem 4.50z**

### **40.1 Theorem 4.50a**

## **41 Theorem 4.50b**

### **41.1 Theorem 4.50c**

### **41.2 Theorem 4.50d**

### **41.3**

]Theorem 4.

## **42 Theorem 4.50a**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **42.1 Theorem 4.50b**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **42.2 Theorem 4.50c**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **42.3 Theorem 4.50d**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **42.4 Theorem 4.50e**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **42.5 Theorem 4.50f**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **42.6 Theorem 4.50g**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **42.7 Theorem 4.50h**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **42.8 Theorem 4.50i**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **42.9 Theorem 4.50j**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **42.10 Theorem 4.50k**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **43 Theorem 4.50m**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **43.1 Theorem 4.50n**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **43.2 Theorem 4.50o**

In the case of a universe with the stringy metric, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **44 Theorem 4.50p**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **45 Theorem 4.50q**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **46 Theorem 4.50r**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **46.1 Theorem 4.50s**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **47 Theorem 4.50t**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **47.1 Theorem 4.50u**

If we consider the case of an expanding universe, it should be interpreted as the result of an expanding universe.

## **48 Theorem 4.50v**

In the case of an expanding universe, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **49 Theorem 4.50w**

### **49.1 Theorem 4.50x**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **50 Theorem 4.50z**

### **50.1 Theorem 4.50a**

## **51 Theorem 4.50b**

### **51.1 Theorem 4.50c**

### **51.2 Theorem 4.50d**

### **51.3**

]Theorem 4.

## **52 Theorem 4.50m**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **52.1 Theorem 4.50n**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **52.2 Theorem 4.50o**

In the case of a universe with the stringy metric, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **53 Theorem 4.50p**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## 54 Theorem 4.50q

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## 55 Theorem 4.50r

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### 55.1 Theorem 4.50s

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## 56 Theorem 4.50t

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### 56.1 Theorem 4.50u

If we consider the case of an expanding universe, it should be interpreted as the result of an expanding universe.

## 57 Theorem 4.50v

In the case of an expanding universe, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **58 Theorem 4.50w**

### **58.1 Theorem 4.50x**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **59 Theorem 4.50z**

### **59.1 Theorem 4.50a**

## **60 Theorem 4.50b**

### **60.1 Theorem 4.50c**

### **60.2 Theorem 4.50d**

### **60.3**

]Theorem 4.

## **61 Theorem 4.30**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **61.1 Theorem 4.31**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **61.2 Theorem 4.32**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **61.3 Theorem 4.33**

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### **61.4 Theorem 4.34**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **61.5 Theorem 4.35**

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### **61.6 Theorem 4.36**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **61.7 Theorem 4.37**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **61.8 Theorem 4.38**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **61.9 Theorem 4.39**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **61.10 Theorem 4.40**

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## **62 Theorem 4.50a**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **62.1 Theorem 4.50b**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **62.2 Theorem 4.50c**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **62.3 Theorem 4.50d**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

#### **62.4 Theorem 4.50e**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

#### **62.5 Theorem 4.50f**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

#### **62.6 Theorem 4.50g**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

#### **62.7 Theorem 4.50h**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

#### **62.8 Theorem 4.50i**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

#### **62.9 Theorem 4.50j**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **62.10 Theorem 4.50k**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **63 Theorem 4.50m**

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The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **65 Theorem 4.50q**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **66 Theorem 4.50r**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **66.1 Theorem 4.50s**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **67 Theorem 4.50t**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **67.1 Theorem 4.50u**

If we consider the case of an expanding universe, it should be interpreted as the result of an expanding universe.

## **68 Theorem 4.50v**

In the case of an expanding universe, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **69 Theorem 4.50w**

### **69.1 Theorem 4.50x**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **70 Theorem 4.50z**

### **70.1 Theorem 4.50a**

## **71 Theorem 4.50b**

### **71.1 Theorem 4.50c**

### **71.2 Theorem 4.50d**

### **71.3**

]Theorem 4.

## **72 Theorem 4.50m**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **72.1 Theorem 4.50n**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **72.2 Theorem 4.50o**

In the case of a universe with the stringy metric, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **73 Theorem 4.50p**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## 74 Theorem 4.50q

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## 75 Theorem 4.50r

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### 75.1 Theorem 4.50s

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## 76 Theorem 4.50t

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### 76.1 Theorem 4.50u

If we consider the case of an expanding universe, it should be interpreted as the result of an expanding universe.

## 77 Theorem 4.50v

In the case of an expanding universe, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **78 Theorem 4.50w**

### **78.1 Theorem 4.50x**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **79 Theorem 4.50z**

### **79.1 Theorem 4.50a**

## **80 Theorem 4.50b**

### **80.1 Theorem 4.50c**

### **80.2 Theorem 4.50d**

### **80.3**

]Theorem 4.

## **81 Theorem 4.50a**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **81.1 Theorem 4.50b**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **81.2 Theorem 4.50c**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **81.3 Theorem 4.50d**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **81.4 Theorem 4.50e**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **81.5 Theorem 4.50f**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **81.6 Theorem 4.50g**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **81.7 Theorem 4.50h**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **81.8 Theorem 4.50i**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **81.9 Theorem 4.50j**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

### **81.10 Theorem 4.50k**

The behavior of the universe is not interpreted in the form of an expanding universe, so that the behavior of the universe should not be interpreted in the form of an expanding universe.

## **82 Theorem 4.50m**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **82.1 Theorem 4.50n**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **82.2 Theorem 4.50o**

In the case of a universe with the stringy metric, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **83 Theorem 4.50p**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **84 Theorem 4.50q**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **85 Theorem 4.50r**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **85.1 Theorem 4.50s**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **86 Theorem 4.50t**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **86.1 Theorem 4.50u**

If we consider the case of an expanding universe, it should be interpreted as the result of an expanding universe.

## **87 Theorem 4.50v**

In the case of an expanding universe, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **88 Theorem 4.50w**

### **88.1 Theorem 4.50x**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **89 Theorem 4.50z**

### **89.1 Theorem 4.50a**

## **90 Theorem 4.50b**

### **90.1 Theorem 4.50c**

### **90.2 Theorem 4.50d**

### **90.3**

]Theorem 4.

## **91 Theorem 4.50m**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **91.1 Theorem 4.50n**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### **91.2 Theorem 4.50o**

In the case of a universe with the stringy metric, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **92 Theorem 4.50p**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## 93 Theorem 4.50q

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## 94 Theorem 4.50r

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### 94.1 Theorem 4.50s

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## 95 Theorem 4.50t

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

### 95.1 Theorem 4.50u

If we consider the case of an expanding universe, it should be interpreted as the result of an expanding universe.

## 96 Theorem 4.50v

In the case of an expanding universe, the behavior of the universe with respect to the stringy metric must be interpreted as the result of an expanding universe.

## **97 Theorem 4.50w**

### **97.1 Theorem 4.50x**

The behavior of the universe with respect to the stringy metric can be interpreted as the result of an expanding universe.

## **98 Theorem 4.50z**

### **98.1 Theorem 4.50a**

## **99 Theorem 4.50b**

### **99.1 Theorem 4.50c**

### **99.2 Theorem 4.50d**

### **99.3**