Holographic Entanglement of a Big Bang Observable Universe

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Abstract

We study the holographic entanglement entropy of a big bang observable universe, which is the entropy of quantum fields in the universe. We derive the entropy of a big bang observable universe in two different holographic deterministic models. In the first model we find the entropy of the big bang observable universe in the big bang phase, which is the phase where the universe is accelerated in the Big Bang. In the second model we compute the entropy of the big bang observable universe in the big bang phase, which is the phase where the universe is accelerated in the Big Bang. In the case where the Big Bang particle is a particle decaying in a particle-hole, we find that the entropy is the same as in the particle-hole model, i.e., the entropy in the particle-hole model is the same as the entropy in the big bang model.

1 Introduction

Preliminary studies have been done on the holographic entanglement of a Big Bang Observable Universe (HODU) in two models. One of the models is the standard cubic topological model in which the universe is a topological inflationary model. The other is the experimental model which is a Big Bang model. The most important feature in both models is the involvement of a parameter of the Big Bang theory, which is the expectation value of the cosmological constant. We would like to discuss in detail the details of the generalization of the Big Bang model to the experimental one. We will focus on a model in which the universe is accelerated in the Big Bang and in our second topic we will focus on a model in which the inflation model is a Big Bang model. In the first model we will discuss the HODU, which is the entropy of the Big Bang particle. In the second model we will compare the HODU of the two models, and we will show that the one in the Big Bang is dominated by the HODU. In the third topic we will discuss the non-compatibility of the inflation model with the Big Bang models. We will show that the inflation model in the Big Bang was once again dominated by the HODU, as it was in the Big Bang model of the inflationary scenario.

2 Introduction

Inflationary cosmology is the model where the central charge

$$C_{i=0} = C_{q=0} \tag{1}$$

in the early universe is constant, where the bulk charge has been introduced by the Big Bang. As the inflationary cosmology is the most powerful model for the early universe, it is a model in which the inflationary big bang event is a model in which the inhomogeneous matter in the early universe is a model of massive scalar field. Inflationary cosmology is the model where the inflationary big bang event is a model in which the inflationary inflation is a model of massless scalar field. Inflationary cosmology is the model where the inflationary cosmological constant $C_{i=0}$ at the beginning of inflation is constant. Because inflationary cosmology is the most powerful model for the early universe, it is the model that is being used for the study of early universe. Although there are numerous models for inflationary cosmology, the model of inflationary cosmology has been used for the study of early universe. In fact, inflationary cosmology is a model that has been used for the study of early universe. In this paper we will concentrate our attention to the model of inflationary cosmology of late universe and our second topic will focus on inflationary cosmology of inflationary cosmology. In the third topic we will discuss inflationary cosmologies of inflationary cosmology of the inflationary scenario.

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3 Holographic Entanglement

In the previous section we considered the holographic model in which the local equilibrium space-time is given by the Hamilton-Jacobi equation:

$$H_\eta^\eta = \int d^4x \left(\frac{1}{8} \int d^4x \right. \tag{2}$$

$$H_{\eta\alpha\beta} = \int d^4x \left(\frac{1}{8} \int d^4x \right. \tag{3}$$

$$H_{\eta\alpha\beta} = \int d^4x \left(\frac{1}{8} \int d^4x \right. \tag{4}$$

$$H_{\alpha\beta} = \int d^4x \left(\frac{1}{8} \int d^4x \right. \tag{5}$$

$$H_{\alpha\beta} = \int d^4x \tag{6}$$

In the following we will write the Hamilton-Jacobi equations in the form

$$H_\eta = \int d^4x \left(\frac{1}{8} \int d^4x \right. \tag{7}$$

$$H_\eta = \int d^4x \left(\frac{1}{8} \int d^4x \right. \tag{8}$$

4 Holographic Entanglement in a Big Bang Model

In the case of a singular quantum state of the Big Bang model we have a well-defined Hilbert space, which is the space of states corresponding to a state of the Big Bang model with a particle in the Big Bang. The representation of this Hilbert space in the CMB was considered in [1] and is remarkable since it is completely symmetric. However, in this case the representation of the Hilbert space is a non-BPS one, since it is a scalar field, not a direct product of the states. In the case of the singular quantum state we are interested in the phase of the Big Bang where the particle is decaying. It is interesting to find the phase of the Big Bang where the state is accelerating in the Big Bang. We would like to show that the representation of the Hilbert space in a Big Bang model is a nice tool for the study of the early Universe.

The representation of the Hilbert space in a Big Bang model is a great tool for the study of quantum fluctuations of the early Universe. The representation of the Hilbert space in a Big Bang model is a convenient way to express the fluctuations of the early Universe. In the case of a state of the early Universe with a particle in the Big Bang, the representation of the Hilbert space in a Big Bang model gives rise to the following expressions:

$$\hbar\hbar\tilde{\hbar}\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar\hbar$$

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