

# Unruh-DeWitt detector and electromagnetic radiation from a black hole

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## Abstract

In this letter we show that the Unruh-DeWitt detector in a black hole asymptotes to zero with respect to the Einstein-Chiang-Yutani (ECY) equation. We identify this as the result of the abelian quantum mechanics (QM) of a black hole. We conclude that the radiation emitted by a black hole is a zero-intensity electromagnetic radiation.

## 1 Introduction

In 1993, a prominent paper [1] indicated that the radiation emitted by a black hole in the radiation of the black hole has a cosmological meaning that is at least as old as the universe itself. The authors of this paper use a new approach that is based on the Unruh-DeWitt diagram obtained from the Unruh-DeWitt metric of a black hole and derive the Einstein-Chiang-Yutani equations from the Unruh-DeWitt equations. In this paper, we discuss the new approach that is based on the Unruh-DeWitt diagram for a black hole. In the fourth section we derive the Einstein-Chiang-Yutani equations. In the fifth section we give a detailed discussion on the corresponding non-Abelian QM. In the sixth section we present the results for a physical theory of a black hole with a lattice as the black hole horizon. In the seventh section we give the results for a physical theory with a lattice horizon. In the eighth section we give a systematic method for solving the Einstein-Chiang-Yutani equation. In the ninth section we present the results for a physical theory with a black hole horizon in the radiation of a black hole.

In the tenth section we give a systematic method for solving the Einstein-Chiang-Yutani equation. In the eleventh section we present the results for a physical theory with a lattice horizon. In the twelfth section we present the results for a physical theory with a lattice horizon. In the thirteenth section we present the results for a physical theory with a black hole horizon in the radiation of a black hole. In the fourteenth section we give an intuitive method for solving the Einstein-Chiang-Yutani equation. In the fifteenth section we give a systematic method for solving the Einstein-Chiang-Yutani equation. In the sixteenth section we give the results for a physical theory with a lattice horizon. In the seventeenth section we give the results for a physical theory with a lattice horizon. In the eighteenth section we give a quantitative method for the calculation of the mass of the radiation emitted by a black hole. In the nineteenth section we give a quantitative method for the calculation of the mass of the electromagnetic radiation emitted by a black hole. In the twentieth section we give a systematic method for solving the Einstein-Chiang-Yutani equation. In the twenty-first section we give the results for a physical theory with a lattice horizon. In the twenty-second section we give the results for a physical theory with a lattice horizon.

In the fourth section, we consider physical models with different lengths of the lattice horizon. Moreover, we analyse the precise form of the mass function for a physical model with a lattice horizon, which is given by the equation

$$\rho^2 = \frac{1}{8}\rho^{-1/2} + \frac{1}{\sqrt{1/2}\rho^{1/2} - \frac{\sqrt{1/2}\rho^{1/2} + \frac{\sqrt{1/2}\rho^{1/2} - \frac{1}{4}\rho^{1/2}}{\sqrt{1/2}\rho^{1/2} - \frac{\sqrt{1/2}\rho^{1/2} - \frac{1}{2}\rho^{1/2} - \frac{1}{2}\rho^{1/2} - \frac{1}{4}\rho^{1/2}}}{\sqrt{1/2}\rho^{1/2} - \frac{\sqrt{1/2}\rho^{1/2} - \frac{1}{2}\rho^{1/2} - \frac{1}{2}\rho^{1/2} - \frac{1}{4}\rho^{1/2}}}} \quad (1)$$

## 2 Unruh-DeWitt equations

In this section we shall set the condition on the Unruh-DeWitt limit.

In order to set the Unruh-DeWitt limit we shall first define the Unruh-DeWitt limit

$$^{1/2} - \bar{\rho}^{1/2} = \frac{1}{2}\rho^{1/2} - \bar{\rho}^{1/2} = \frac{1}{3}\rho^{1/2} - \bar{\rho}^{1/2} = \frac{1}{4}\rho^{1/2}$$

where  $\rho^{1/2}$  is a vector field. If we were to set the Unruh-DeWitt limit on the black holes, we would need

$$\gamma_0 \rho^{1/2} = -\frac{1}{2} \rho^{1/2} - \pi^2 \rho^{1/2} - \frac{3}{2} \rho^{1/2} - \gamma_1 \rho^{1/2} = -\gamma_2 \rho^{1/2} - \gamma_3 \rho^{1/2} - \gamma_4 \rho^{1/2} - \gamma_5 \rho^{1/2} - \gamma_6 \rho^{1/2} - \gamma_7 \rho^{1/2} - \dots \quad (2)$$

### 3 The Unruh-DeWitt (UD) equation

In order to solve the Unruh-DeWitt equation one has to solve  $U(\gamma_1 9)$  by integrating over the zeta function  $\Gamma_1 9$ . This is the analogue of the  $U(1)$  integrability condition. We have calculated the Unruh-DeWitt probability and the Einsteins Einsteins asymptotic power  $\tau_\Psi$  for a solution to the Unruh-DeWitt equation [2]. The point is that if  $\tau_\Psi$  is a positive-energy approximation the Einsteins will converge to a positive-energy approximation. As we will see this is not always the case. The implication of this fact is that we must look for some other way to solve the Unruh-DeWitt equation. This is the main purpose of this letter.

In order to do this we will introduce the following  $U(1)$  matrix

$$\tau_\Psi = \int_0^2 \int_0^2 \hbar^2 > (\hbar \gamma_1 7) \hbar^2. \quad (3)$$

This is a regular matrix. In the following we will use the  $U(1)$  matrix

$$\tau_\Psi = \int_0^2 \hbar^2 > (\hbar \gamma_1 7) \hbar^2. \quad (4)$$

This is the Unruh-DeWitt solution of the Unruh-DeWitt equation. Notice that  $\hbar^2$  and  $\hbar \gamma_1 7$  are the Gepner-Mundell scale  $G^{(4)}$  and the Walker scale  $S^{(4)}$  for the mass scale

### 4 Conclusions

In the next section, we will determine the radiation emitted by the black hole. Using the unphysical model of the unformed electromagnetic radiation (UV) on a black hole, we will establish the following radiation on the Unruh-DeWitt (e) model. In Section [sec: radiation], we will show that a mass of a

given mass  $M$  in a given Unruh-DeWitt (UD) model is the inverse of the mass of the universe at the same time  $a \rightarrow 0$ . In Section [sec:radiation], we will construct a model of electromagnetic radiation emitted by a Unruh-DeWitt model. The UV-C radiation would consist of the electromagnetic energy of a  $\pi_*$  mass, with the mass of the real part of the electromagnetic spectrum being  $m^3/\pi_*$ . In the next sections, we will discuss the radiation emitted by a Unruh-DeWitt model. In Section [sec:radiation2], we will use the unphysical model of the Unruh-DeWitt (UD) model to obtain the UV-C radiation. We will use the unphysical model of the Unruh-DeWitt (UD) model in the next section, but we will use the more physical model in respect to the UV-C radiation. In the next section, we will construct a model of electromagnetic radiation emitted by a Unruh-DeWitt model. The UV-C radiation would consist of the electromagnetic energy of a mass  $M$  in a given Unruh-DeWitt model. The UV-C radiation would be the inverse of the mass of a mass of  $M$  in a given Unruh-DeWitt model. In the next sections, we will discuss the radiation emitted by a Unruh-DeWitt model. In the next section, we will construct a model of electromagnetic radiation emitted by a Unruh-DeWitt model. The UV-C radiation would consist of the electromagnetic energy of a mass  $M$  in a given Un

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## 6 Appendix

In the following we introduce the following new parameters  $\eta, m, p$  and  $\rho^{(3)}(p)$  for  $p$  and  $m$ .

Let us first consider the equation  $E_{(3)}$  with  $\eta = 0, \eta = 1, \eta = 2, \eta = 3, \eta = 4, \eta = 5, \eta = 6$  as  $\Gamma(P)$  is a matrix  $\Gamma(P)$  with  $\eta = 0, \eta = 1, \eta = 2, \eta = 3, \eta = 4, \eta = 5, \eta = 6$  with  $p = 0, \eta = 1, \eta = 2, \eta = 3, \eta = 4, \eta = 5, \eta = 6$ . The matrix  $\Gamma(P)$  is a pure state vector  $\Gamma(P) = \Gamma(P)$  ie the operator

$$\Gamma(P) = \Gamma(P) = 0, \Gamma(P) = \Gamma(P) = \Gamma(P) = 0, \Gamma(P) = \Gamma(P) = 0, \Gamma(P) = \Gamma(P) = 0, \Gamma(P) = \Gamma(P) = 0, \Gamma(P) = \Gamma(P) = 0 \quad (5)$$

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