

Creator's Games – the Universe from the Inflaton

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Abstract

The birth of the Universe from the Inflaton is a modern physical version of the biblical creation of the World.

Text

The inflaton is the initial object of the inflationary model of the birth of the Universe.

The closest linguistic relative of Inflaton is the Word or Logos.

Google on the request - "In the beginning was the Word" - gave out results:

approximately 6,600,000,000, - and the first on the page, - the definition of initial object in three versions:

In the beginning was the Word, and the Word was with God, and the Word was God.

In the beginning there was One who is called the Word. He was with God, and He was God.

In the beginning was the Logos, and the Logos was with God, and the Logos was God.

Any option is easy to adapt to the inflaton, for example, the Logos, which - "... in the dictionary of the ancient Greek language of Joseph Dvoretzky has 34 nests of meanings ..." - so the 35th will not seem superfluous:

In the beginning was the Inflaton, and the Inflaton was with God, and the Inflaton was God.

By the way - this is slightly reminiscent of the definition of information given by Norbert Wiener - "... Information is information, not matter and not energy."

Thus, we can assume that the inflationary model with the inflaton is a modern physical version of the biblical creation of the World.

Therefore, it is unlikely that the inflaton decays in 10^{-35} s - in one form or another it should be present now - producing the space-time necessary for the constant expansion of the visible universe - most likely, it is present in the form of a one-sided adiabatic film on border with nothingness.

Qualitative estimation of the expansion duration

In the family of Planck units, there is a maximum temperature for photons $T_{\max}=1.417 \cdot 10^{32}$ K.

It would be useful to construct a minimum temperature - for example, using the Hubble constant $H_0=2.2 \cdot 10^{-18}$ Hz.

Then for the minimum temperature we have $T_{\min}=h \cdot H_0/k=1.056 \cdot 10^{-28}$ K, - here h and k are the Planck and Boltzmann constants.

The natural logarithm of the temperature ratio $\ln(T_{\max}/T_{\min})=138$ is close to the reciprocal of the fine structure constant.

Now the temperature of relic photons is about 2.7 K - it will take a long time to cool down to the minimum, even if the cooling is exponential. So we still have time to think about the nature of things, and it seems that we will not move on to the next of the three likenesses of the Creator en masse soon.

Instead of conclusions

Games in words or words, -

Not invented by us.

Word games - endless, -

The Creator made for us? -

Or for timeless?