Citation WIKI

The expansion of the universe Alexander Fridman developed the expansion of the universe theoretically and used Einstein's equations of general relativity. According to these equations, it is impossible for the universe to be stationary (not to expand or contract). This expansion can be observed indirectly on very distant objects (quasars) and their light spectra (spectral lines). The so-called redshift is known. For example, the more distant galaxies are, the greater their redshift and the faster they are also moving away from us. This dependence is almost linear and is expressed by the Hubble constant (Edwin Hubble was the astronomer who observed and promoted this dependence). But the Doppler phenomenon is not the only possible explanation.[2] There are also observations that contradict the expansion of the universe.[3] Model evolution of the universe thus often has to accurately compensate for the expansion of the universe so that theory is consistent with observations.[4] The cause of the increase in the speed of receding (redshift) with time is not known, the action of dark energy is considered one of the possible causes, but according to another theory, acceleration does not occur and the phenomenon is caused by the gradual slowing down of time.[5]

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**https://www.irozhlas.cz/veda-technologie/veda/teorie-velky-tresk-laureat-nobelova-cena-fyzika_2010051946_tzr**

# I don't like the name The Big Bang Theory, says Nobel laureate James Peebles in an interview Cosmologist James Peebles

won the Nobel Prize in 2019. As a member of Robert Henry Dicke's group, he participated in the clarification of noise captured by an experimental antenna. It was the remnants of radiation left in space after the big bang. Štěpán Sedláček recorded an exclusive interview with the 85-year-old emeritus professor of Princeton University for Czech Radio Plus. “The radiation was first detected as an unexpected noise by Bell Labs' experimental antenna just 40 miles from Princeton. For five years this anomaly was muffled... However, Arno Penzias and Bob Wilson deserve recognition for the persistence with which they tried to solve this mystery. This was achieved when they contacted Bob Dicke's team and his group," recalls James Peebles for Český rozhlas Plus. When they learned about the captured radiation, they were developing a detector to find the relic radiation. Peebles worked on a related theory in the aforementioned Dicke's group - and the rest is history. Arno Penzias and Robert Wilson won the Nobel Prize in 1978 for their discovery of the radiation left in the universe after the Big Bang. Peebles, who won the Nobel Prize in Physics last year for theoretical discoveries in the field of physical cosmology, made a significant contribution to the cosmological theory of the same name about the evolution of the universe. The big bang theory is known today. Its name is also shared by a popular American series, in the opening song of which the audience learns that the universe began to expand almost 14 billion years ago from a state of hot dense matter. The origin of the theory is associated with scientists such as Georges Lemaître, George Gamow and others. You also contributed to its development. At the same time, you don't like its name. Why? According to this theory, there was no special place in the universe.

O.K. That "place", that singularity is anywhere..., and therefore it can be that "anywhere" there are billions of "places - singularities". So if the singularity is ANYWHERE, it's there too!!! in that "anywhere" and then the "beginning" of **our** universe is "everywhere" according to Treskov, where there is a singularity, i.e. the beginning is everywhere and always, it is "big" almost infinitely = almost zero. If our universe arose from a "pre-big-bang flat or in it, in the pre-big-bang, infinite 3+3 dimensional, then "in this state" there could be a jump = change of state ""**from flatness of state to extreme curvature of state**"" and why such a state should be "singular ???? Such a state (new), such a region is almost infinitely large, it is an extra super-curved space-time (near-infinite = near-zero)⋯, it is "embedded" in the original infinitely smooth 3+3 dimensional space-time, and this new post-Cod super-curved state is almost infinitely large = almost zero large. No one (no mathematician) knows how "big" is zero at infinity, how big is the near-zero segment on the infinite line..., whether "zero=singularity" is near-infinite or near-zero. Then this means that our universe did not start with a singularity, but its state of extreme curvature of dimensions "was everywhere" not at a point...it was everywhere and the 3+3D supercurved was almost infinite not singular. Hubble observations say that space-time expands axially "in a straight line"... but this may not be true, it expands "in a straight line" up to the age of approx. 400,000 years, but then the curvatures of all 3+3D dimensions quickly and sharply curve until the state " boiling foam" dimension = plasma where the elementary particles are born...Then the interpretation is the same as I have been presenting it for 20 years on the net. You will surely think that I am talking nonsense here, that the recognized singularity = almost a point cannot actually be a huge space-time that "came into being" after the big bang, and what's more, it is extremely extremely crooked. And to tell about it here that it is a state of plasma which does not expand but expands. But you can better imagine "your surrounding 3+1D space-time" with the size **r** = kilometers and **t** = minutes, hours, just a normal environment. But try to realize that in "our cosmic space-time almost flat, where the clock somehow normally ticks", there is a vacuum all around us (dimension 3+3D) and realize that it is "boiling", that it is "foaming" ... and that such the vacuum is simply everywhere, up to the most distant quasar galaxies. This means that the visible universe with galaxies, which we already understand with our mind-brain and understand it as "flat", that actually this

"""floats""" in that boiling vacuum, in that "foam of dimensions", which is less and we understand little and do not realize that it is so, it can be. Hubble and his followers believe that the universe is expanding **from volume R3 = $(10^{-44})^3$ $m^3$** ( **R** = Planck length ) **up to the volume R3 = $(10^{27})^3$ meters$^3$ today**. But this necessarily "increases" the volume of the vacuum itself, i.e. the boiling vacuum. Today, this vacuum in every cubic meter of space should have a volume **of R3 = $(10^{27})^3$ meters$^3$**, so how much? vacuum? That much? That much? **R3 = $(10^{-44})^3)^{27}$ $m^3$**. ?? According to physicists with a Nobel Prize, all matter, i.e. **$10^{56}$ kg**, was created in a big bang, suddenly like a whip cracking. It was only then realized by arrangement into "structures" and genesis into other more complex structures. Etc. If, after the big bang, this "boiling vacuum" was a foam of boiling dimensions, boiling, acquired to the point of bursting by "visible matter" of **$10^{56}$ kg** in the form of plasma, then these quarks and gluons and photons (which were born - born from Nothing) "floated" ), then they floated in that wobbling space-time **R3 = $(10^{-44})^3$ $m^3$** ? ..., the foaming vacuum then suddenly "inflated" and "straightened out" the dimensions that were !crumpled" and so these elements "at the same time" merged, or fused or flew away...;

***in the vacuum*** there is nothing left, the "primordial" vacuum has emptied itself. Only the "big universe" expanded and the vacuum did not expand, it remained "in its dimensions"... right? Nobel Prize winners! yes but it increased in volume, the volume grew. Is that so, scientists??. And is today's vacuum "boiling", is the dimension "there" foaming?? If so, then it is in the form of some plasma, or "dark energy"; in the plasma, the basic elements of matter (?!) should be in what density? ..? We should further complete this new consideration: so far you have understood that the universe "**expands**" from the point = from a singularity of size **$10^{-44}$m**. Now try to understand that before the big bang, the 3+3D Universe could have been flat, infinite (therefore it did not have to expand), it was without the flow of time, without matter, without fields (and without laws and rules). After the Big Bang it was different. The Big Bang was a (**sudden-jump**) change in the state of flat dimensions 3+3 to extremely curved dimensions. Not a "jump" into the singularity, but everywhere along the originally flat space-time. A boiling vacuum was suddenly everywhere, the entire universe was a boiling vacuum. ((what is the "whole" universe will be discussed later, today it is http://www.hypothesis-of-universe.com/docs/c/c_017.jpg )). **Why should it**

**only be in the singularity??** The entire universe began, not to expand, but to **unpack** (into large-scale states... the large-scale universe does not expand from the singularity, but from each point of the vacuum it is possible that the large-scale the universe **and its volume R3 = $(10^{27})^3$ meters$^3$** with all galaxies and nebulae already expanded, i.e. already seemingly almost flat, floating "in a vacuum", i.e. floating from the point of view of a vacuum) + **simultaneous packing** ( into geons-packages-balls of mass elements, then atoms, molecules.. etc. ..etc.) ...; the curvatures of dimensions unfold. (of course the time dimensions also expand...; and we will talk about that another time in a different interpretation.) The universe was almost homogeneous and the observer would see the same thing from any point. That is, "our" universe "started" with a boiling vacuum everywhere, everywhere! Maybe there is an edge of the universe that we know but can't see. This is not like the idea of a big bang. The infinite, flat stoic 3+3 space-time before the Bang (without the flow of time, without matter, without fields, without laws) suddenly changed into an infinite, but crooked, with crooked dimensions, i.e. "everywhere" boiling foaming vacuum. (what is "Everywhere" will be discussed later. The author himself says here that the Observer sees the same thing from every, any point "on the universe")

The theory also does not focus on a specific time period, as it would with an explosion. It describes the evolution of the universe from a hot and dense state. The standard theory reckons with a special moment when the density of matter reached an unrealistic magnitude. You know that claim didn't hold up. There had to be something there before. The best candidate is inflation. Although this theory is promising, we still lack a lot of empirical tests. It's a nice idea, but we don't know if it's completely correct. And there are other alternatives.

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