

Why does anything exist at all? why there is something and not nothing – now and before the current universe.



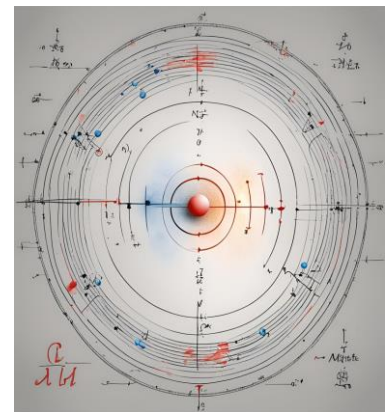
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We live in a relatively cool, hydrogen dominant atomic universe. The universe is relatively cool because greater than 95% of it has a temperature within 300 Kelvin (K) of absolute zero. Our nearest star to earth is the Sun and it has a core temperature of only 15 million degrees. This is relatively cool in comparison to temperatures after and at the big bang – that range from 10 billion degrees to 1 trillion degrees and above.

At first, these numbers seem mind-boggling and confusing. However, these numbers and the current universe that we observe, provides a clear explanation that demonstrates the nature of existence prior to the big bang. As so often is the case, these clues are hidden in plain sight.

It is important to note at this point that the matter/anti-matter equation of our universe is not the reason there is something instead of nothing. Even energy is something and Einstein's formula $E = MC^2$ shows the energy-mass equivalence. In simple terms, anti-matter is simply matter with an opposite charge. As a result, the questions that remain are; Why does this current universe exist, Why does anything now or before this current universe exist and What existed prior to this universe and its big bang?



Firstly, it makes no sense to believe in a state of nothing that comprises a state of no matter, no energy, no space-time or existence of any kind. This is because we cannot observe such a state in the current universe or even conceptualize it. This is because whether it be the current universe or the period before the big bang, we observe and/or conceptualize there being one or more things such as matter energy, space and time.



In a sense, the word nothing means not anything and it is subject to the rules of existence which demands that there be something at a base level and not nothing – as the word misleadingly suggests. Even empty space has quantum particles and fields coursing in and around it along with the space-time geometry of it. This simple, logical disbelief in nothing also guides us towards what existed before the big bang. There was clearly a quantum duration prior to the big bang where the heat and density made it impossible for atoms to exist.

As it is now, it was impossible before the big bang to have a state of no matter, no energy, no space-time or existence of any kind because there is no construct for zero existence. There was clearly something that progressed over time to a point where it became so unstable that it disintegrated and exploded into the current universe we see today.

The enormous expansion and temperature of the early universe indicates an enormous explosion of whatever came before the current universe. Could this have been a colossal black hole or quark star? Could it have been one of the theorized time crystals where entropy seems not to increase over time? I suspect that what came before our universe was a top quark star that developed over a quantum duration akin to a time crystal that disintegrated into the current universe.