

The theorem of the rapidly expanding universe

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The “ fact” that the universe goes on forever is widely debated by physicists and astronomers everywhere. The problem is, it’s a paradox.

The universe is expanding because of the force of the big bang, Einstein proved that, but if the universe is expanding, it can’t go on to infinity, because nothing is more than infinity. And if the universe doesn’t go on forever, then why is it called a universe, which means there is only one, and it is the only thing in existence? If the universe doesn’t go on forever, then there has to be something outside of it, but if there’s nothing outside of it, then of course it has to go on to infinity. Originally, Einstein thought the universe wasn’t expanding, and that it had a mathematical force known as the cosmological constant which kept the universe from snapping back on itself, but then he realized that the universe was expanding, so it didn’t need the cosmological constant to keep it apart. So the universe going on forever contradicts the greatest genius that ever lived, as nothing can be greater than infinity, and thus the universe could not expand if it was infinitely large. The universe exploded out of a speck of nothingness that was infinitely small, and there was absolute nothingness before the universe. But there cannot be absolute nothingness, because technically nothing is something in terms of space, so there has to be something besides the universe, or at least something had to exist before the big bang happened.

So the universe cannot go on forever, or there would not have been nothing before the universe and thus there would have had to be true nothing before the universe, because in terms of physics, nothingness is nothing but absolute nothing has to be something, so before the universe something did exist, provided the universe does not go on to infinity. But anything that can

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go on to infinity obviously has to not have a source or a center, because of course infinity cannot be contained in any form of anything because infinity goes on forever. But the universe absolutely cannot go on to infinity because infinity cannot be contained in anything, yet the universe exploded out of something, which confirms that the universe does not go on forever. Many people say that if the universe was infinite, then of course in the nighttime when you looked straight in any direction in which you could see the sky, your gaze would automatically fall upon one of the infinite number of stars. So the entire night sky would seem to you to be as bright as any nearby star, and of course there are massive dark patches in the sky, so the universe is not infinite.

But others say that of course the universe is infinite, but there are simply either patches that contain no stars at all, or spots in the universe surrounding Earth that have stars so far away that it is taking billions of light-years for their starlight to reach our eyes. The basic idea of spatial reasoning is that everything has to have a beginning and an end, and thus the universe cannot go on forever. This is often considered the most likely theory, and it is also widely thought that the universe is infinite in size, but not in time. But if the universe is infinite in size, then it still would not have been able to fit in an infinitely small speck of nothingness. And if the universe is finite, and it is expanding and spherical, as Einstein proved, then one theory is that if your spaceship went along the edge, the gravity of the planets and stars around the center of the universe would pull you so you would never reach the edge.

Another highly probable idea favoring the fact that the universe is finite is related to a Greek myth: A tortoise and Achilles are having a race. Achilles
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can run ten times faster than the tortoise, so the tortoise is given a ten second head start. The tortoise will win because every time Achilles reaches the spot where the tortoise just was, the tortoise will have moved another tenth of the distance that Achilles has run. The universe is much the same. If your spaceship approaches the edge of the universe, by the time you reach where the universe's edge was before, it will have moved another small distance and will keep doing this forever. It is still undecided whether the universe goes on forever or not.

It is basically a paradox, yet is still highly debated by the top astronomers and physicists of the world, and it may never be decided. But maybe someday in the future, a team in a spaceship will venture to the farthest reaches of the universe and find out what is all around the human race.