

$$E = m.c^2$$

Why does time flow forward? This question has had an immeasurable impact on theoretical and quantum physics. Time is always running forward and we know this from birth: we are born babies and grow old and we have no chance to go back and change our mistakes. Besides, we don't know the future, we only remember the past and we always have to look at the next game, whether it will be better or worse. However, it is very difficult to prove in physics this common sense fact that people know intuitively; because the laws of physics would continue to operate unchanged even if time passed from the future to the past. Even though we don't meet people who are getting younger in daily life like Benjamin Button (Cher is an exception), we couldn't find enough scientific evidence to explain that time moves forward. So, why is that?

It is mainly because of Albert Einstein's theory of relativity. According to this theory, space and time can be perceived differently depending on the observer. After all, for the laws of physics to be universally valid, they must be symmetrical in time. Think about it, if the laws of physics had changed as time passed into the past, the laws of physics in the Universe should have been different before we were born. So, in this case the point is not to show why time moves forward, nor is it to show how time flows. The main thing is to show why time does not flow into the past; because we know that the Universe started super orderly at the big bang, and the disorder increased over time. In this case, we come across one simple paradox. It tells us why time flows forward and why we don't go backwards.

It is a grandfather paradox. In summary, if someone went back in time and caused his grandfather's death, that person's father would never have been born. Then the person would not be born and would not go back and cause the death of his grandfather. This theory actually explains why time does not go backwards in the process of biological evolution, rather than going forward. As I mentioned at the beginning, it is insufficient to explain everything through a paradox. However, this is not the only project currently being carried out regarding the forward movement of time. Of course, there are also experiments on bosons. Lots of studies like these say time goes forward, but that doesn't mean we can't go back in time. There are studies to make it possible to go back in time with the power of today's mind, and even experiments on teleportation have been carried out since the 1970s. There is only one conclusion we can draw from these studies. Time can both go forward and we can go back in time. Let's just wonder!

