

How Big is Time?

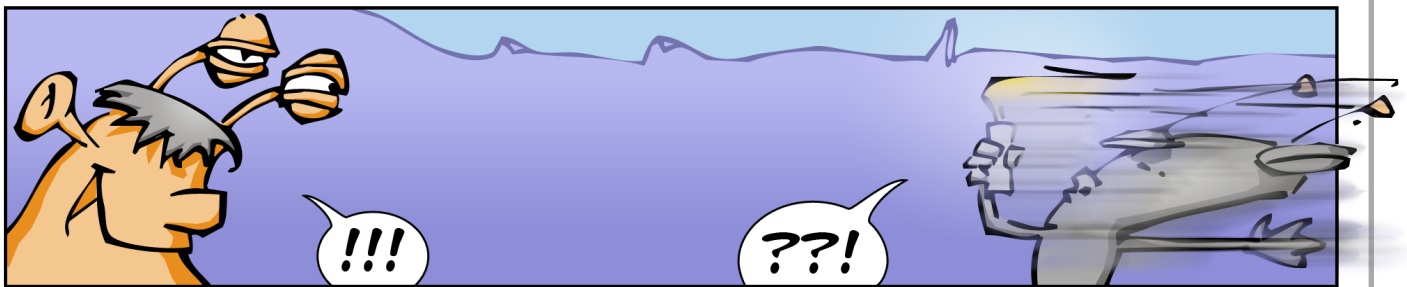
When you look at a star you are seeing it in the past!

That's because it takes so long for the light from that star to reach us across the distance. Sunlight takes about 8 minutes and 17 seconds to travel from the Sun to the Earth – and the Sun is REALLY NEAR in space terms!



Experiment

It's not easy to get your head round that, but try this simple demonstration. Light a candle, or hang up a piece of thread. Stand a little distance away and blow. What do you notice?*



Did you notice a small delay between your blowing and the thread or candle flame moving? That's the time it takes for your breath to move through space. With outer space the distances are so big, even light takes a long time to travel across the distances.

But last year seems long ago to me. Where do I fit into this big space-time?

Take a piece of string about 10 metres long. That represents the age of the Universe so far.

Tie a single thread around it somewhere. The width of that thread is all of human evolution and history relative to the age of the Universe.



So... it's not surprising it's hard to connect with other life in the Universe. Infinite space and infinite time make a very big haystack to search for a needle in!