

Journeying to outer space - an impossible dream?

Ladies and gentlemen. Welcome to this scientific conference.

As we all know humans are curious creatures. We are always attracted by unknowns, especially the mysterious space. Therefore, we desire to explore and investigate in the vast universe. It turns out that space travel is the only way to fulfill our wants. So is it an impossible dream? Here, I'd like to make an analogy. Can you recall how humans invented planes? We were curious how birds could fly in the sky and dreamed of doing the same thing one day. With a lot of time and efforts, travelling by plane is possible and affordable to the majority. Now, it is just another form of transport. Therefore, I believe that one day and that day should not be far away, journeying into space will be similar to travelling abroad by plane.

Actually, going to space nowadays is not a rare thing. Since the first satellite was successfully launched in 1957, the Space Age began. Almost 70 years have passed and there are hundreds of astronauts and tons of spacecraft, including rockets and satellites, which have been launched into space. But why is space journeying still a big challenge to humans?

First, rockets used these days cannot carry a lot of people and they are extremely expensive. According to SpaceX, each rocket costs at least 100 million USD to produce and another 100 million USD to launch. This is astronomical to us, isn't it?

Another reason is that going into space is a risky venture. There will be a lot of dangers, such as space radiation, isolation and confinement, as well as the lack of gravity. Journey to outer space is lethal without appropriate training and protection.

The last reason is that spacecraft create a huge amount of junk. Could you imagine there are more than 500,000 pieces of space junk that are orbiting Earth? If we don't clean them up, they will stay there forever. Doubtless to say, launching rockets is environmentally unfriendly.

From the above, we can see rockets aren't effective for space travel. Then, what can we use instead? The answer is 'space elevator'. This sounds like a fantasy from a sci-fi movie. However, scientists have already started working on this unprecedented project since the 1960s.

Space elevator is a planet-to-space transport, which works like an elevator in a building and is safer to normal people than rockets, as we don't need to overcome a 3 times Earth gravitational force when setting off. There will be a cable from the Earth surface to a counterweight which is about 100 000 km from the ground. The most important mission is to produce a light but strong cable. Unfortunately, it cannot be made in large quantities, but it is estimated that the construction of space elevator will start from 2030 and finish in 2050, also the fee will be affordable, just about a few hundred USD.

To conclude, with humans' curiosity, imagination and determination, I believe journeying to space will not be an impossible dream in the future. What do you think? Are you ready for this exciting journey? Thank you.