

Wolfson Teaching Company course Lecture 36

When Einstein presented his general theory of relativity in 1916, it predicted the universe should be either expanding or contracting. The general view was that it was static, so he put a fudge factor in his equations to eliminate this effect. He later stated that was a big mistake.

In evolution of stars, hydrogen fusions into helium ($N=2$). very improbable that three heliums would fuse to form carbon ($N=6$). Two heliums can collide to form an isotope of **Beryllium**, which is very unstable but this particle can then collide with another helium to form carbon, essential for life. If the life time of the **Beryllium** were only a little shorter, carbon would never have formed, and life would not have developed.