The Large Hadron Collider at CERN is recreating the conditions that prevailed a fraction of a second after the Big Bang.

We can detect radiation from the early formation of the Universe back as far as this point. Before this, the Universe is opaque: it's as if a veil has been pulled over it.

Matter clumps together under its own gravity forming the first protogalaxies and within them, the first stars. Stars are nuclear furnaces in which heavier elements such as carbon, oxygen, silicon and iron are formed. Massive stars exploding as supernovae create even heavier elements. Such explosions send material into space ready to be incorporated into future generations of stars and planets.

In a few billion years the Sun's outer layers will expand as it turns into a Red Giant star. Life on Earth will become impossible. Expansion of the Universe will continue to accelerate.

In 13.7 billion years, this is where we are today. Using our own ingenuity, humanity is probing the depths of the Universe and trying to unravel its mysteries, from our tiny, home planet, Earth. The visible Universe contains billions of galaxies, each comprising billions of stars. Within our own Galaxy, hundreds of exoplanets have been discovered orbiting other stars.