



The Big Bang: the creation of the perfect universe for life to evolve in

Transcript: Video clip from *Wonders of the Universe*, episode four.

SCIENCE PRESENTER BRIAN COX:

As the universe expanded, the slightly denser regions became increasingly dense. Atoms clumped together to form the first structures.

Over time these structures grew so massive that they collapsed under their own gravity. Hydrogen fused, releasing enormous amounts of energy.

200 million years after the Big Bang, the first stars in the cosmos burst into life. Darkness was banished and the cosmos began to fill with light. Planets formed and fell into orbit around the stars and these young solar systems orbited the galaxies.

And the only reason why any of this exists is because of those tiny density fluctuations that appeared when the observable universe was smaller than a grain of sand.