



Department of
Science and
Technology

ORIGINS OF THE UNIVERSE



**13.7 ± 0.2bn
years ago:**
Universe, which
includes time and
space, begins with the
Big Bang

**300 000 years
after the Big Bang:**
Hydrogen nuclei capture
electrons, forming the first
atoms

**600m years
after the Big
Bang:**
Formation of first
galaxies

**5bn years
ago (8.7bn
years after
the Big
Bang):**
Formation of
the Sun

4.5bn years ago:
Formation of the Earth and
other planets – start of
geologic timescale

**3.5bn years
ago:**
First signs of
single-celled life
on Earth

**600 to 500m
years ago:**
Multicellular life
evolves

**12 to 10 thousand
years ago (the
Holocene epoch):**
Homo sapiens invent
agriculture; start of human
civilization

**2.5 to 2m
years ago:**
Appearance of the
genus Homo

**About
150 000
years ago:**
Appearance of Homo
sapiens.

