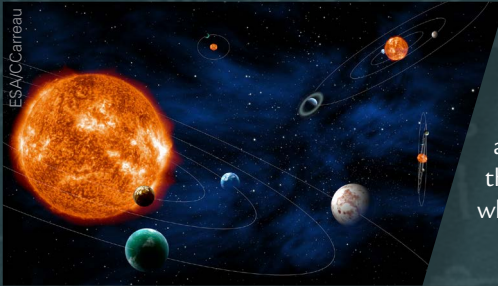


TWENTY-FIVE YEARS

This is the 100th issue of CATALYST – we have been around for 25 years. Here are some of the most significant discoveries that we have reported on in that time.



An artist's impression of multiple planetary systems orbiting stars

1995

The first exoplanet was discovered. Now astronomers have identified almost 2000 planets orbiting stars other than the Sun. It is estimated that there are over 10 billion Earth-like planets in the Milky Way galaxy alone which might harbour life.

1997

The first mammal to be cloned was Dolly the sheep, the result of work at the Roslin Institute near Edinburgh. Today, geneticists are trying to produce improved strains of farm animals and poultry as well as to recreate extinct species such as the mammoth.



The announcement that a sheep had been cloned for the first time aroused great media interest.

2001

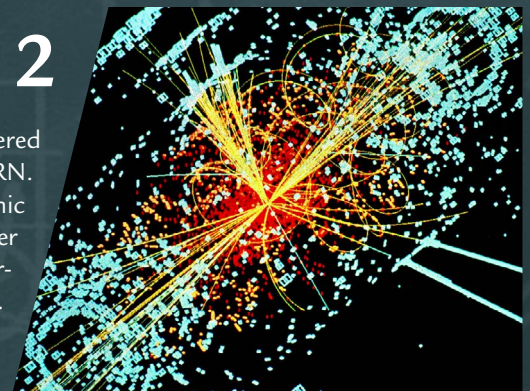
The human genome was sequenced for the first time, a mammoth effort involving scientists from over 20 institutes. DNA sequencing is now much faster and cheaper. The UK's 100 000 Genomes Project will sequence 100 000 whole genomes from NHS patients by 2017.



The results of the Human Genome Project were published in the scientific journal Nature in February 2001.

2012

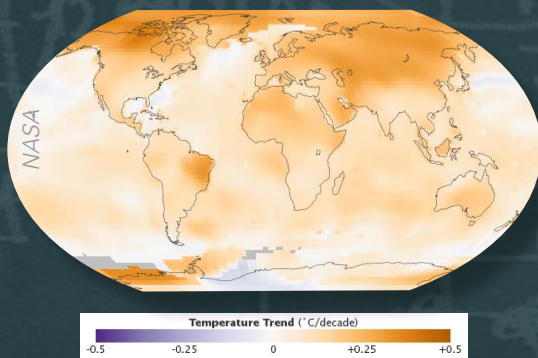
The Higgs boson was discovered using data gathered by experimenters at the Large Hadron Collider, CERN. This confirmed the current theory of sub-atomic particles and the forces between them. The collider has now been overhauled, allowing for higher-energy collisions to be studied.



A simulated collision in the CMS detector of the Large Hadron Collider. Data from 6 quadrillion collisions were analysed.

2014

The fifth report of the Intergovernmental Panel on Climate Change (IPCC) studied all the available evidence and confirmed that carbon dioxide released when fossil fuels are burned is the major cause of global warming. They called for more urgent action on the part of governments around the world.



This map shows the rate of increase of the Earth's surface temperature between 1950 and 2014.