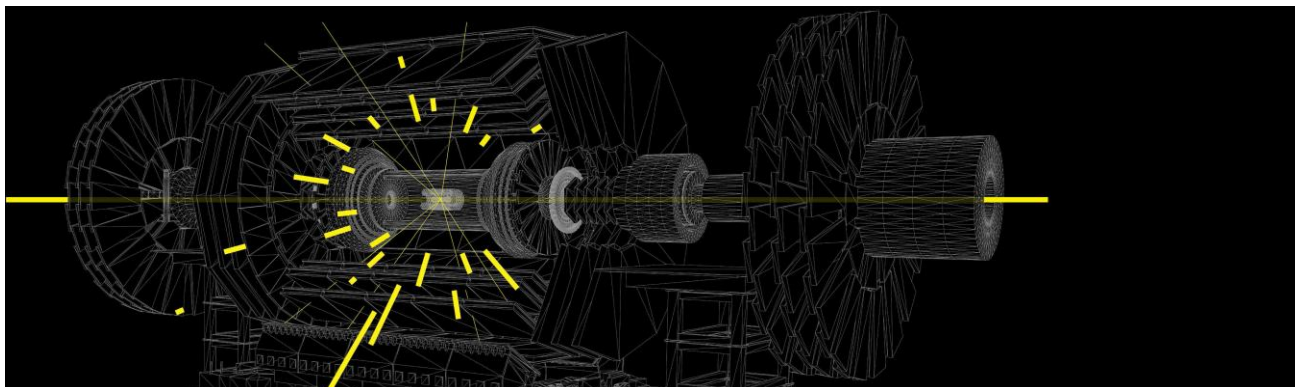


Fact Sheet



Collider

14 November 2015 – 14 February 2016

Introduction

For the first time in Asia, visitors can experience the fascinating world of experimental particle physics and take an up-close look at the world's greatest scientific experiment: the Large Hadron Collider (LHC) at the *Collider* exhibition. First developed by the Science Museum in London, the exhibition is making its Asian debut at ArtScience Museum at Marina Bay Sands on 14 November.

This immersive and ground-breaking exhibition blends theatre, video and sound art with real artefacts from CERN (the European Organisation for Nuclear Research) in Geneva, recreating a visit to the famous particle physics laboratory and allowing visitors to witness the beautiful visual representation of a collision, where a shower of new particles is produced.

Fun Facts about The Large Hadron Collider (LHC)

- The Large Hadron Collider is the largest, most sophisticated and most powerful scientific device ever made. It is being used by thousands of scientists and engineers around the world to learn more about the tiny building blocks that make up our Universe and the laws that govern their behaviour.
- The precise circumference of the LHC accelerator is 26,659m (almost the same length as London Underground's Circle Line), with a total of 9,300 magnets inside.
- When in operation, trillions of protons race around the LHC accelerator ring 11,245 times a second, travelling at 99.9999991% the speed of light. Altogether some 600 million collisions take place every second.
- When two beams of lead ions collide, they generate temperatures more than 100,000 times hotter than the heart of the Sun.
- By contrast, the 'cryogenic distribution system', which circulates superfluid helium around the accelerator ring, keeps the LHC at a super cool temperature of -271.3°C (1.9 K) – even colder than outer space.