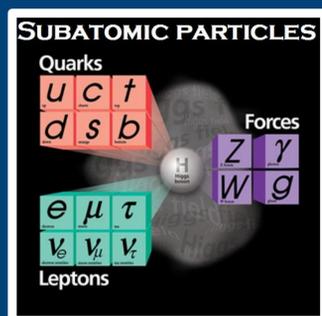
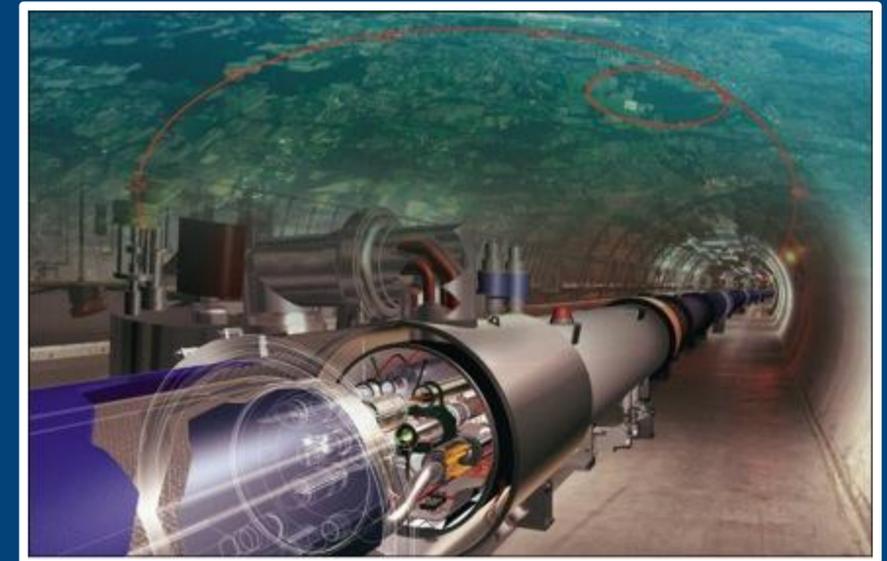
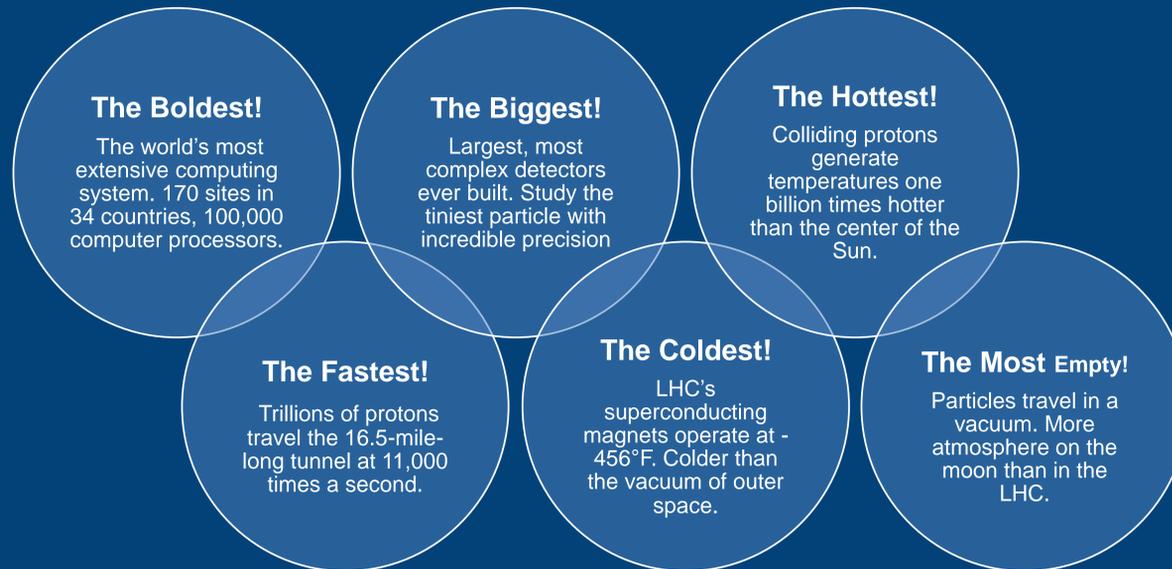


The Large Hadron Collider (LHC)

Exploring the Energy Frontier

The LHC is in search for some of the most exciting science of our time. Fermilab hosts the CMS experiment Tier 1 and the LHC Physics Analysis Centers in the US.

The LHC is....

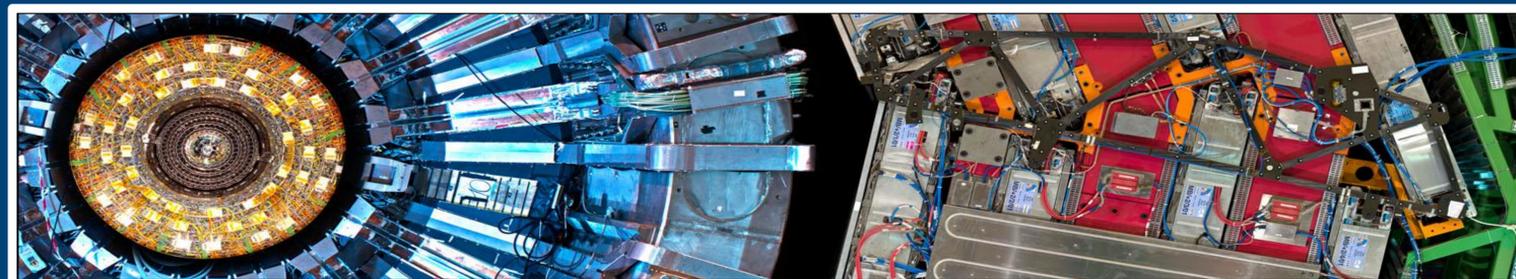


The Standard Model of Particle Physics

Is the best current understanding of the building blocks of the Universe. Despite more than 30 years of experimentation, we are still missing a main component, the Higgs particle.

The Higgs Boson

Is the only elementary particle predicted by the Standard Model which has not been observed so far. The Higgs theory explains how most of the subatomic particles obtain their masses.



The CMS Experiment

Is one of the four biggest experiments at the LHC. About 3000 physicists, engineers, and technicians from around the world work on this detector. CMS is searching for the Higgs boson and for new phenomena never seen before that will help us to understand the mysteries of the Universe. The CMS experiment began operations in Spring of 2010 and will run in the current configuration through late 2012. Then, after a two year upgrade period, it will resume operations with twice the current collision energy.

