



Physics Without Borders

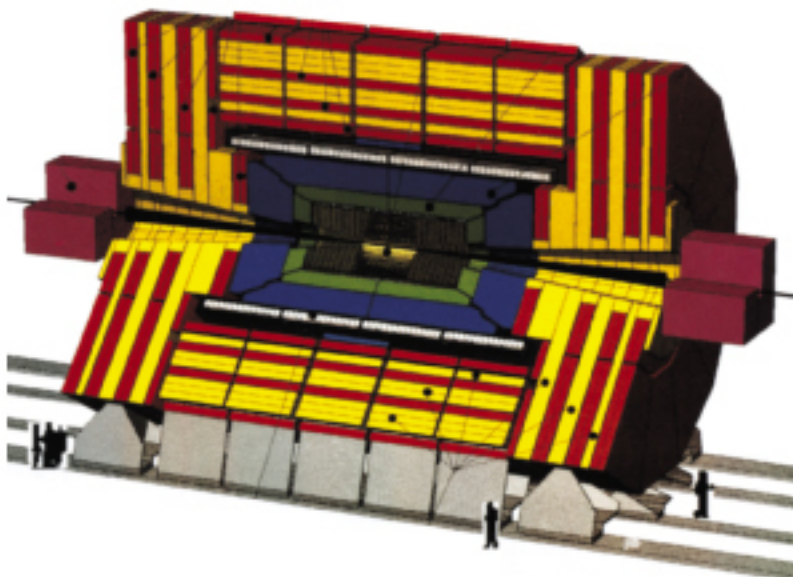
Fermilab is making significant contributions to the Large Hadron Collider Project at CERN. Fermilab is building advanced superconducting quadrupole magnets for the accelerator, and Fermilab is the host laboratory for the U.S. CMS collaboration.

The LHC will be built in an existing accelerator tunnel at CERN, west of Geneva, Switzerland. The LHC will be the most powerful particle accelerator yet built, opening another dimension in the study of nature and its forces.



CMS

Two large international collaborations of scientists, of whom about 20 percent are U.S. physicists, are building the ATLAS and CMS detectors, the major particle detectors for the LHC. Fermilab is the host laboratory for US/CMS.



The LHC represents a cost-effective opportunity for U.S. scientists to continue to work at the energy frontier – and to develop the technologies for building the accelerators and detectors that will someday follow the LHC.

Imre Gonczy, in Fermilab's Technical Division, works on an advanced magnet for the LHC. Fermilab is the lead laboratory for the U.S./LHC accelerator project.