

LHC Ready for Duty Again

February 21 2010, by Miranda Marquit

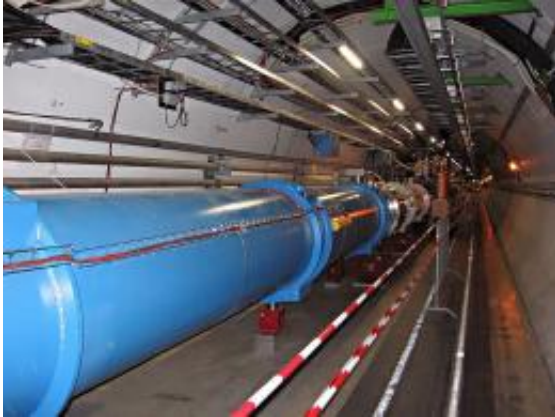


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(PhysOrg.com) -- For the Christmas holiday, the Large Hadron Collider at CERN was shut down for a break and for a little technical tinkering. But next week, the hope is that the LHC will start up again around the 25 of February.

The [Large Hadron Collider](#) is used in experiments involving smashing particles together at high speeds. Just before the Christmas break, the LHC had sent [particles](#) careening into each other and resulting in energies not seen before. The hope later this year is to gradually get the LHC to the goal of 7 TeV, smashing the previous record. The collider is built for collisions resulting in 14 TeV, but that level probably won't be reached anytime in the immediate future.

Just reaching 7 TeV will take some time. Scientists plan to rev up the LHC slowly, starting initial beams at that produce relatively low energies of around 900 GeV at collision. CERN honchos want to avoid a situation similar to the explosion that marred the LHC's initial run in 2008. The hope is that a gradual warm up for the LHC will ensure that everything is in working order as CERN races the Tevatron in the U.S. to be the first to pinpoint the elusive [Higgs boson](#).

The LHC is expected to help solve some mysteries in [particle physics](#), as well as possibly provide information about other dimensions and further insight into the origins of the universe.

More information: CERN LHC: lhc.web.cern.ch/
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