News

LHC Update for September 2012

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Abstract

This news is adapted from viXra log (<u>http://blog.vixra.org</u>) and contains LHC updates through October 3, 2012.

Key Words: LHC update, September 2012.

September 17, 2012: LHC Update

The Large hadron Collider has now entered a planned technical stop for a few days before proceeding with the last phase of proton physics runs before the long shutdown.

The amount of luminosity delivered this year at 8 TeV is now 15/fb with about 14/fb recorded in each of ATLAS and CMS. LHCb has about 1.4/fb. If this is added to last years 5/fb at 7 TeV the two big experiments now have about twice as much data for Higgs analysis than they did when they produced the discovery back in July. In the past they have given an update each time the data was doubled but now that the discovery is done they are in less of a hurry. Indications are that they will not do another update until the 2012 run is complete. That should add another 10/fb to the total.

Before the technical stop they managed to collide protons and heavy ions for the first time. This will be used early next year to add another dimension to the study of the quark gluon plasma.

Update 22/09/2012: There is contradictory information about whether there will be an update with the current data. Dorigo had said<u>he thought there would not be</u>, but <u>Incandela according</u> to <u>Motl</u> says we will get an update for <u>Hadron Collider Physics</u>, in <u>Kyoto</u>, <u>November</u>. Assuming the more recent news is correct this means that they will take a leisurely 8 weeks to prepare the data if they start from the technical stop (which is now ended).

References

1. http://blog.vixra.org/2012/09/17/lhc-update-3/

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