**Discovery of God particle**

In the history of particle physics, 4th July 2012, has been an important day. After fifty years of hard work finally in Geneva, CERN scientists had some good news coming their way with Higgs Boson also known as God particle discovered, which would have far reaching understanding of our universe. At that moment entire science fraternity, gathered there, and erupted into spontaneous applause. One of the persons present was Higgs on whose name God particle was named which is really a rare feat in science where his discovery was proved during while he/she was living unlike most of his counterparts.

Let us understand what the experiment was in detail. It was designed to create conditions similar to what would have existed just after Big Bang and to look for Higgs Boson under those conditions. Two streams of Hydrogen protons are accelerated at close to speed of light. They are then bent using super cooled magnets so that particles collide to generate enormous amount of heat and energy and creating subatomic particles. Everything is expected to be in a free flowing state with no mass, moving at the speed of light. Scientists were looking for evidence for the existence of the Higgs boson under these conditions. It is the last particle which was to be discovered in a Standard Model theory of Physics which explains the properties of matter and forces governing them. Higgs boson lasts extremely short period of time and decays into spray of other particles and steaks of energy having mass of 100-200 times of proton when alive. The discovery was tested at 5 sigma level which means statistical error of about 1 in a million.

The technology for world wide web was also developed at this center which will help in increasing the internet speeds by 1000 times. This discovery is also important by way the “Science” will progress in the future. If the things turn out similar to what is expected in simplest form then scientists will know they are on the right track, else all the theories relating to the matter, energy, forces and universe and Standard Model will have to be looked at again. Also, we are only aware of matter and energy which only comprise of 4% of the total cosmos. So, research has to go on about dark energy, dark matter and other forces consist of 96%. There is also issue of ‘SUSY’ i.e. super symmetry, which predicts that for every particle there is an anti-particle. So, there has to be two Higgs boson. We have just discovered the tip of what is massive iceberg. s