

Describe the structure of the large hadron collider and what it does essay sample...

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Describe the structure of the Large Hadron Collider and what it does. The Large Hadron Collider is a particle accelerator that is 27km long ring-shaped tunnel made mainly of underground magnets. It is located close to Geneva between the borders of France and Switzerland. This machine accelerates particles. Two beams of particles are sent racing around the ring in opposite directions. At the end, those beams that travel close to the speed of light are collide. This LHC was made by physicians to re-create the scene of aftermath of the Bing Bang explosion. They hope that the LHC's collisions will create particles that will explain how our Earth was born.

Are the scientists observing the Higgs Boson directly or indirectly? Provide at least one detail to support your answer. The scientists are observing the Higgs Boson indirectly because, " Physicists could not hope, however, to see the Higgs boson directly, as it decays into other particles immediately." It is impossible directly to observe the Higgs boson; therefore, they can only predict the data. " Such indirect observations don't give us 100% certainty of course, so physicists quantify their certainty using sigma levels."

In your opinion, is the new particle the Higgs Boson or some new unexpected particle? Provide at least one detail to support your answer. In my opinion is the new unexpected particle. "' According to Allanach, however, we can be sure we've found a Higgs boson-like particle. And excitingly, the slightly unexpected results for one mode of decay, where the Higgs boson decays into two photons, might indicate something new..." It is a new particle that the scientists do not know anything about.