

Honors Topic Assignment #2

Paper Copy Due Friday September 28

Please read the "[Three new experiments could revamp the standard model](#)" from Science News. It is a long, dense article so be prepared to look up words you don't know and read it in a few sittings. Please also read "[The Standard Model](#)" from Discover Magazine.

After reviewing these resources please answer the following questions in a reflection. You can answer the questions individually or write them as a short reflection essay. Please make sure to use complete sentences as well as correct spelling and grammar.

Feel free to discuss your answers with others, but make sure that your reflection is in your own words and reflects the conclusions which you arrived at. If you do discuss this assignment with other students from the honors class, please list them at the top of your reflection.

Reflection Questions:

1. The Science News article is a sort of sequel to "Particle Fever." It covers three experiments which are trying to dig deeper into our understanding of the standard model and answer questions that still surround it. Briefly write a synopsis of each experiment and what it is trying to discover. Make sure to include where each is located.
2. To build the Hadron Collider and confirm the existence of the Higgs Boson it cost approximately \$13.25 billion. Work continues at the Hadron collider, but these new experiments have added to the cost of exploring the standard model. Look up these costs in the Science News article and consider the synopsis of the standard model in the Discover Magazine Article. Based on this information and your own ideas, what are your thoughts on the cost of discovery in fundamental science?
3. What was the most fascinating/surprising information that you discovered in either article?
4. Please list any words or phrases which you had to look up (and what you found).

No additional problems this week due to micro-project!