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Solar System

Solar Nebula

While reading the text I began to discover knew aspects of our solar system that I had not given too much thought before. For instance the search for our origin why things are the way they are. Key targets need explanations are, pattern of motion, why planets fall under two categories, existence of huge asteroids and comets, while interpreting a general idea that has open interpretation for some exceptions.

Where did our solar system come from, is one of the biggest questions of all time. Over time there have been many philosophers and Astronomers that have challenged this idea and debated of such open ended question, and it has morphed into an explanation that we have now. We believe that the gravitational collapse of an interstellar cloud of gas called *solar nebula* collapsed under its own gravity. Then this cloud gave birth to the sun. Before this collapse, all the matter in space is assume to have been 98% hydrogen and 2% helium. This collapse also explains the pattern of motion that we now have.

Later on I came upon the reason that we have two types of planets. Our solar system contains both *Terrestrial and Jovian* planets. The terrestrial planets are assumed to be more dense and rocky because they formed in the inner circle of the nebula. Opposed to the Jovian planets that formed in the outer region where it was much colder. The colder area made it possible for gasses to condense and begin to create small atoms that would mold into a planet as time went on. Many of these planets, had a snowball effect where they grew as time went by until they had created a big enough surface to have their own gravitational pull.

The existence of asteroids and comets is a question that has a similar response to the creation of planets. Asteroids are “Rocky leftover planetismal” from the inner solar system. They were planets in the forming however did not have enough time to fully form. Comets have a similar history with the exception that they are composed of icy leftovers and were created in the otter layer of the solar system.

In conclusion I believe that it is quite fascinating to see how our solar system was created. It also makes sense for it to take billions of years to be created, especially when acknowledging that it just took one fusion between Hydrogen and Helium to create such an immense life form.

**Questions:**

Have we tried to make a fusion between Hydrogen and helium to see what reaction we get? And if he have, what result did we get?

How do we explain the different sizes of our planets? Was it pure chance?

2.; aprrox 400 meter

3. (1/33 )\* (282000/1.6) = 5340 Saturns