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Galileo Galilei was the first to observe Saturn, however due to the low power of his telescope and the position of the planet he didn't understand the exact form and so he gave up the observation. Just in the 1656 the true form of Saturn was discovered thanks to Christiaan Huygens who identified the planet and understood that it was encircled by a thin and bright ring.

Later, in 1675 Cassini supposed that this ring was formed by other thinner rings, but Édouard Roche was the first to suppose, that these rings were remains of a satellite which, having gone too near Saturn, was powdered because of a strong tidal force. It showed that a limit exists in nature, known as the limit of Roche (when two bodies have the same density, this limit is around 2.5 times the radius of the planet or the star) beyond which any solid body near another bigger body would have been smashed, and wouldn't have the possibility of reuniting again. Nowadays we think that this limit has some influences on the actual form of the rings, given their structure.

The reason why the Cassini mission is so important is the hope of obtaining answers about the mysteries of gravity and its disturbances to close bodies. Also studying the Saturn system it is possible to have some important information that we can use for other planets or the solar system. The most fascinating aspect of Saturn, isn't just the beauty of its rings seen through a telescope, but also its chemical composition and that of the same planet. In effect, Saturn is composed by 75% of hydrogen, 25% of helium and there are also some traces of water, methane and ammonia, and a nucleus formed by iron, silicon, carbon, nitrogen and oxygen, while its rings are formed especially by little pieces of ice. So, why not, we can suppose that the life on Earth could have been originated by little meteorites from Saturn. Maybe one day we can use Saturn like a source of hydrogen and fuel for future spatial cars.

What is more, thanks to new photos, we will be able to understand the origins of the rings, or even to find some new and more interesting rings. In effect in October 2009, a new ring in the outskirts of Saturn was identified, thanks to the spatial telescope Spitzer, and we can suppose that it was originated by Febe, one of its many satellites. Despite this new ring is

enormous, it isn't possible to see it through a simple telescope, but just in infrared spectrum, that doesn't reflect the visible light.

Like Dante coming out of Hell said these words: "E quindi uscimmo a riveder le stelle" (And then we exited to see the stars), we hope that with the Cassini mission we could say "And then we discovered the mysteries of Saturn".