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A comparison of the four terrestrial planets - the similarities are striking
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[Mercury and Mars Were Part of the Same Ring](#)

New theory makes use of the resemblance between the two

According to a new theory, Mars and Mercury could have been part of the same rocky ring around the Sun, in the early days of the solar system. In its earliest form, the distribution of our planets in the system may have looked completely different, and some say that the orbiting ring around the Sun was the birth place of Earth and Venus.

The theory was sparked by the fact that a simple look at the first four planets from the Sun reveals that Venus and Earth are fairly similar in size, which also holds true for Mars and Mercury, which have about the same circumference. Knowing that generally rocky rings around a young star only favor the appearance of two planets, one in the inner rim and the other in the outer one, astronomers have concluded that Earth and Venus must have been the two planets.

However, the two celestial bodies that are forming amid space debris are not the only things left behind when the belt disappears. Smaller bodies are also formed, but, because they are literally pushed out of the way by the larger ones, end up being thrown out of the solar system altogether. Nevertheless, if they experience collisions along the way, they may enter a stable orbit, outside the influence of the planets that sent them away in the first place.

Once in stable orbit, and outside the reach of the rocky ring from which they originated, the smaller bodies can no longer acquire mass, and are forced to remain limited to the size they had when they were hurled away. Researchers now say that this is exactly what happened to the four terrestrial planets, and also that this would account for why the next planets are so massive by comparison, and why they are made up of gas.

This would also seem to support the theory according to which a Mars-scale object struck the Earth about 500 million years after our planet's formation, and generated the Moon. According to some, following the incident, the Earth got [two](#) inner cores, which still exist today.