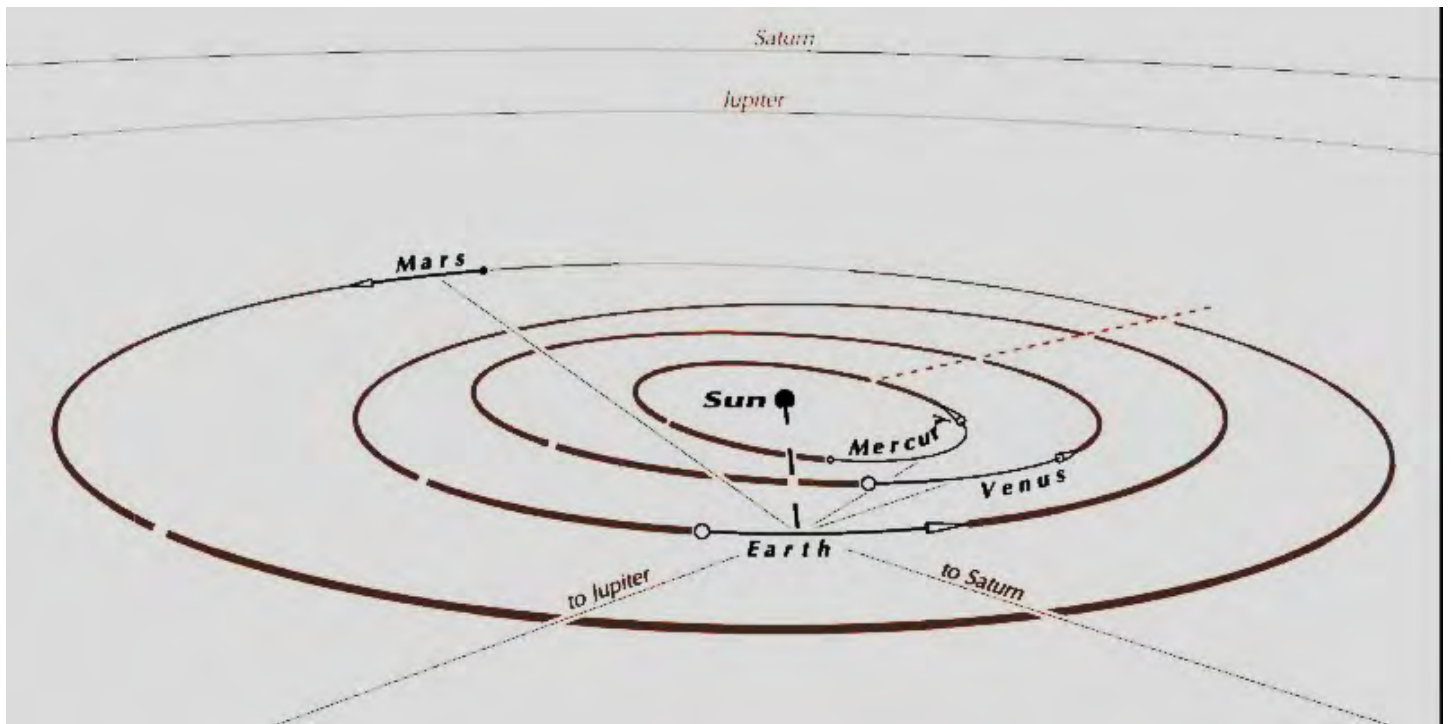


A VIEW OF THE INNER SOLAR SYSTEM



A view of our solar system, as seen from earthly north, for May 2017. The planets are exaggerated 300 times in size, the sun 5 times. A dashed line shows the vernal equinox direction.

The five bright planets are scattered widely around the circle, so that we are in an arid period for conjunctions between them. The last conjunction was when Venus passed Mars on February 2; the next will be when Mercury comes around in front of Mars on June 28.

At present, Mars is the only planet in the sunset scene. Jupiter is higher, not long past its opposition. Saturn is in the high morning sky, rising before midnight. Venus and Mercury – to the “right” (west) of the sun – are in the morning twilight.

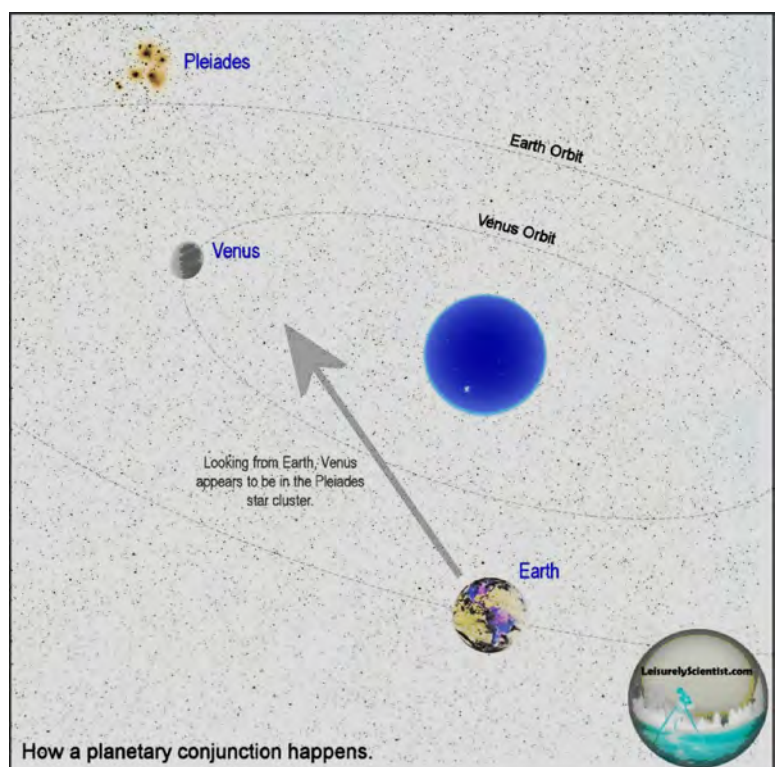
Conjunctions involve either two objects in the Solar System or one object in the Solar System and a more distant object, such as a star. It is an apparent phenomenon caused by the observer's perspective: the two objects involved are not actually close to one another in space. Conjunctions between two bright objects close to the ecliptic, such as two bright planets, can be seen with the naked eye. Conjunctions occur all the time, some spectacular, others routine.

It's important to remember that these conjunctions are only from our perspective here on the planet Earth, the objects are never actually close together.

An example is this conjunction between the planet Venus and the Pleiades star cluster in the constellation Taurus. This conjunction took place on April 12, 2015.

The terms "inferior conjunction" and "superior conjunction" are used in particular for the planets Mercury and Venus, but can be applied to any pair of planets, as seen from the one farther from the Sun.

The Moon is in conjunction with the Sun at New Moon.



The Pleiades actually lie about 440 light years behind Venus in the night sky, but from our perspective they appeared to be side-by-side.