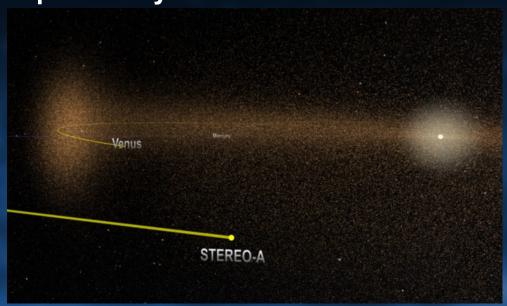
An Asteroid Belt Co-Orbiting With Venus

A dust ring discovered in the same orbit as Venus is thought to be caused by a ring of asteroids never previously observed.

The STEREO and Helios missions both observed a ring of dust orbiting the Sun with Venus that is likely caused by co-orbital asteroids.

In a new study, a supercomputer was used to calculate the trajectories of more than 1,000,000 particles in the inner solar system, to determine the dust source.



Of all the possible scenarios examined, only one hypothesis fit to the data: a ring of asteroids co-orbiting with Venus, which have gone unobserved because of the challenge of pointing telescopes in the general direction of the Sun.

A substantial reservoir of asteroids located at the orbit of Venus could be a source of hazardous near-Earth asteroids, and could supply important clues to how the solar system formed.