

9.12: Comets

Often called dirty snowballs, **comets** are really more like snowy dirtballs. Presently, there are around 5,000 known comets; with new comets being discovered all of the time. The number of known comets is much smaller in number than the known number of asteroids. Many comets orbit in the **Kuiper Belt** and the **Oort Cloud**. Comet orbits are often highly elliptical, so much so that these orbits are sometimes described as cigar-shaped. Comet orbits around the sun can be a short period (<200 years) or a long period (>200 years).

Comets are named after their discoverers, which is a tradition that spans centuries. And hundreds of years ago some European astronomers made their living discovering comets.

We have seen a comet impact a planet; Comet Shoemaker-Levy 9 impacted Jupiter with 21 cometary fragments in July 1994. Gene and Carolyn Shoemaker and David Levy discovered the comet.

“Comets are like cats. They both have a tail and they both have a mind of their own...”

—David Levy (1994)

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