## Galaxies

A galaxy is a massive collection of billions of stars. Our Galaxy is arranged in a shape like a fried egg, 100 000 lightyears across. This collection is called the Galaxy because we see it in the band of stars across the night sky called the Milky Way (the Milky Way is a pale blotchy white band that stretches right across the night sky,



**Cartwheel Galaxy** 

HST - WFPC:

black + white picture right). Galaxy comes from the Greek for milky.

The Earth is just over half way out along one of the spiral arms of the Galaxy, about 30000 light-years from the centre.

Earlier this century it was realised that the Galaxy is

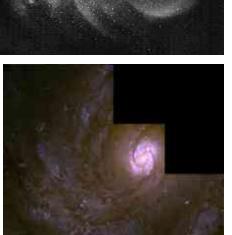






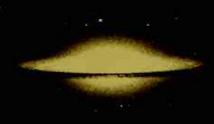
just one of millions of similar giant star groups scattered throughout space, which we also call galaxies. The nearest is the Andromeda Galaxy.

The American astronomer Edwin Hubble suggested in 1925 that galaxies can be divided into 4 main types; elliptical, spiral, barred spiral and irregular. Our galaxy is a spiral galaxy (like a fried egg shape with spiral arms). Spiral galaxies



are the most noticable but there are more elliptical galaxies than any other kind.

Our Galaxy belongs to a small cluster called 'The Local Group', The three largest members are spirals, our own



Milky Way, the Andromeda Galaxy (M31) and M33. About 18 dwarf elliptical and irregular galaxies make up the rest of the Group.

Some distant galaxies emit intense radio waves, which can be picked up on Earth with radio telescopes. These are called Radio Galaxies.