What is the difference between a solar flare and solar prominence?

- Solar prominence lasts much longer, and go much farther

- Solar prominence have little effect to us on Earth because they stay controlled within the sun's magnetic field

- Solar flare gets directed to the north and south poles of Earth's magnetic field, creates disturbances in radio transmissions and satellites. We can see the effects by observing the Northern lights.

- P.453 # 1, 2, and 7
- Read p. 461-463

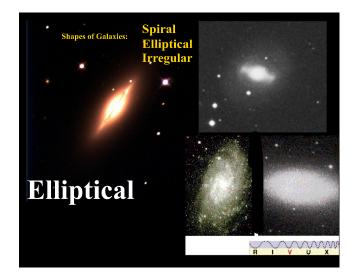
The Universe

We know that planets orbit the stars, but the Sun and the other stars are also moving. Stars are gathered in large groups, surrounded by gas and dust. The groups of stars that our Sun belongs to is called the Milky Way Galaxy. <u>A galaxy</u> is a huge collection of gas, dust, and hundreds of billions of stars and planets.





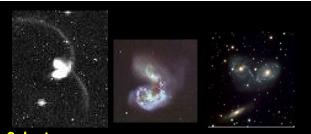
The Milky Way is disk-shaped with our solar system located near the outer part of the disk. The thicker inner layer is called the central bulge. The entire Milky way Galaxy rotates around the bulge.





Spiral





<u>Galaxies:</u>

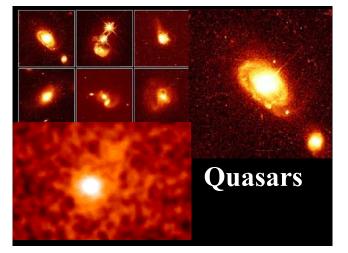
Some galaxies appear to be in the process of colliding and recombining, tearing stars away from each other. Sometimes small galaxies are swallowed by larger ones.
Some violent galaxies emit far more energy than average galaxies.

Quasars

Objects that look like a faint star but emits up to 100 times more energy than our entire galaxy. Quasars are starlike



http://www.youtube.com/watch?v=qhaQ_f_5Z5k



Star Cluster

A group of stars that are relatively close and travel together. These clusters may have as few as 10 stars or as many as a million: too few to be called a galaxy.

