Galaxies

How do we classify the billions of galaxies in the Universe.
Galaxies

- **Galaxy** - a system of millions or billions of stars and various amounts of gas held together by gravity

- Average galaxies have around 100 billion stars
Galaxies

- Space contains several billion galaxies that glow from the combined light of all the stars
Galaxies

- Galaxies have been classified by the following:

  Irregular
  Elliptical
  Spiral
Galaxies

- Irregular - smaller and fainter galaxies where the stars are spread unevenly
  - Less common than other types of galaxies

Irregular Galaxy - NGC 1427A
Galaxies

- Peculiar - a type of irregular galaxy that are abnormal in size, shape or content
  - May be a result of galactic interactions

Interacting Galaxies - IC 2184
Merging Galaxies
Galaxies

- Elliptical - galaxies that are nearly spherical to lens-shaped

Elliptical Galaxy - NGC 1316
Galaxies

- Spiral - galaxy with a bright nucleus surrounded by a flat disk with spiral arms [usually two] coming out from opposite sides and trail behind as the galaxy rotates
Andromeda Galaxy - NGC 224
Galaxies

- **Milky Way Galaxy** - our solar system is part of a spiral shaped galaxy with 200 billion stars
Galaxies

- **Local Group of Galaxies** - small group of 40-50 galaxies around the Milky Way
Local Group of Galaxies