

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



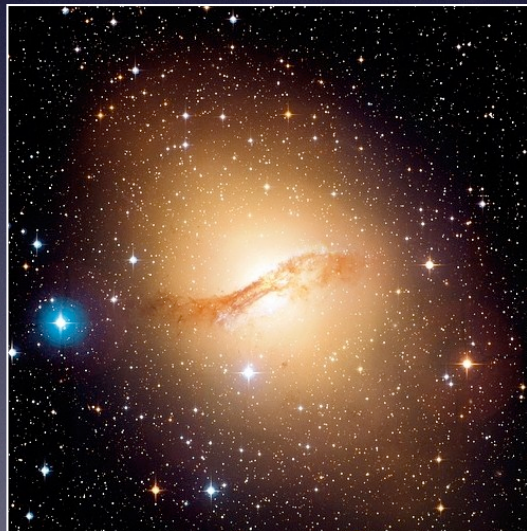
Galaxies

- Galaxies have been classified by the following:

Irregular



Elliptical

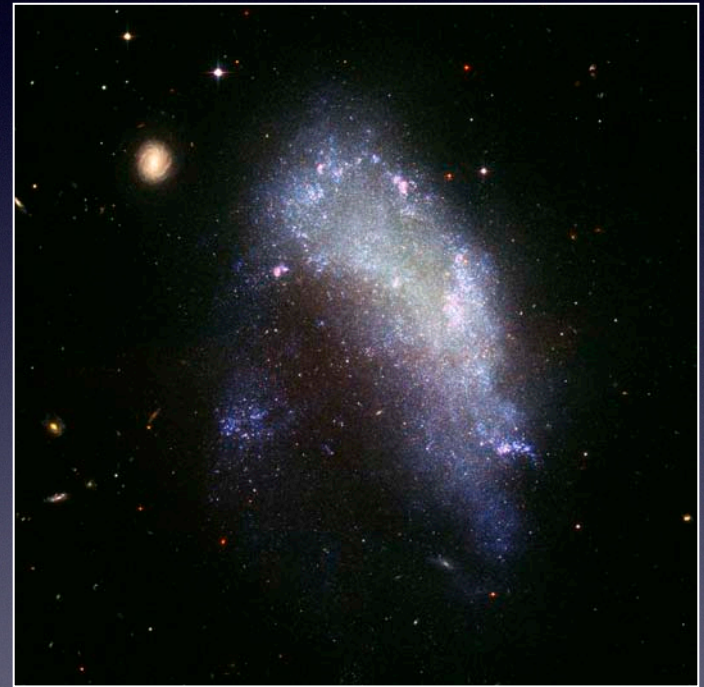


Spiral



Galaxies

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



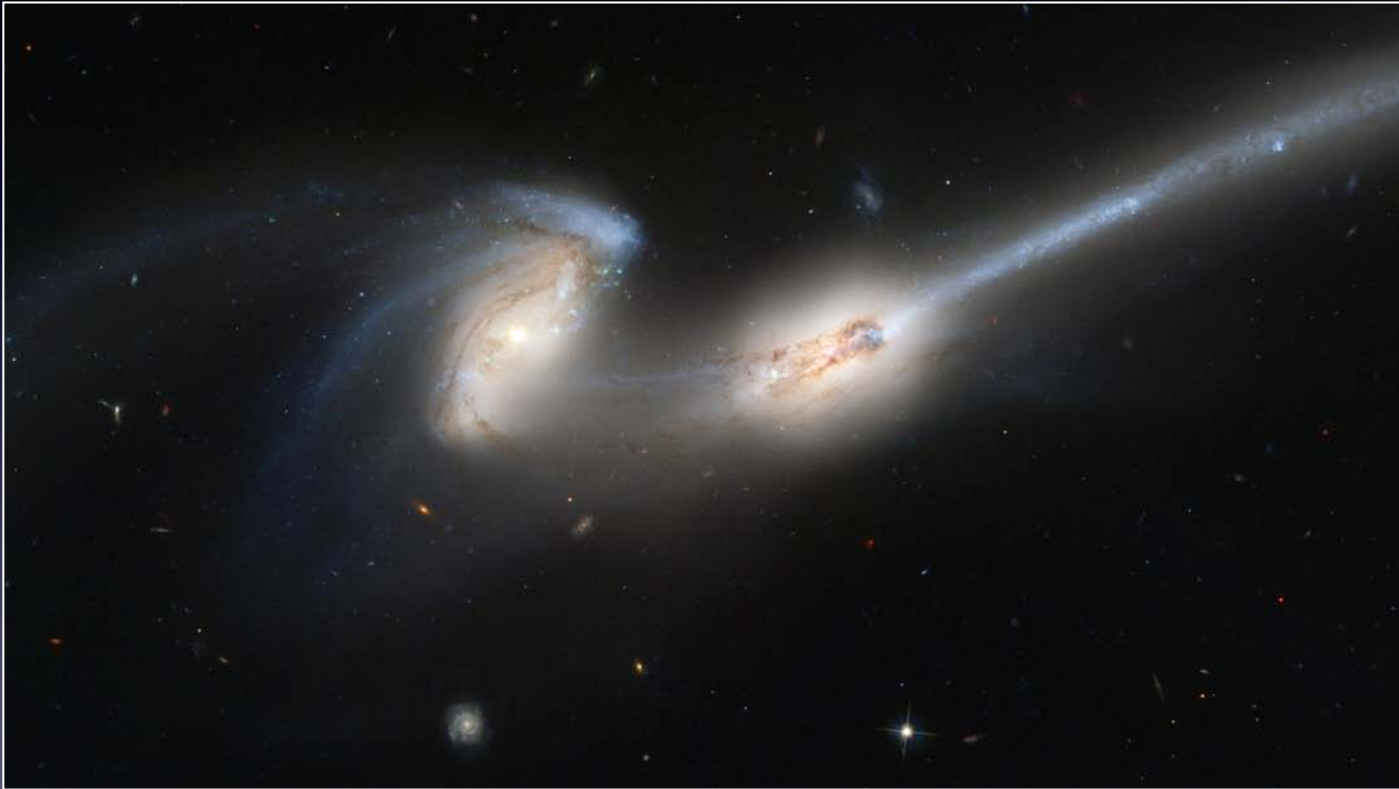
Irregular Galaxy - NGC 1427A

Galaxies

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



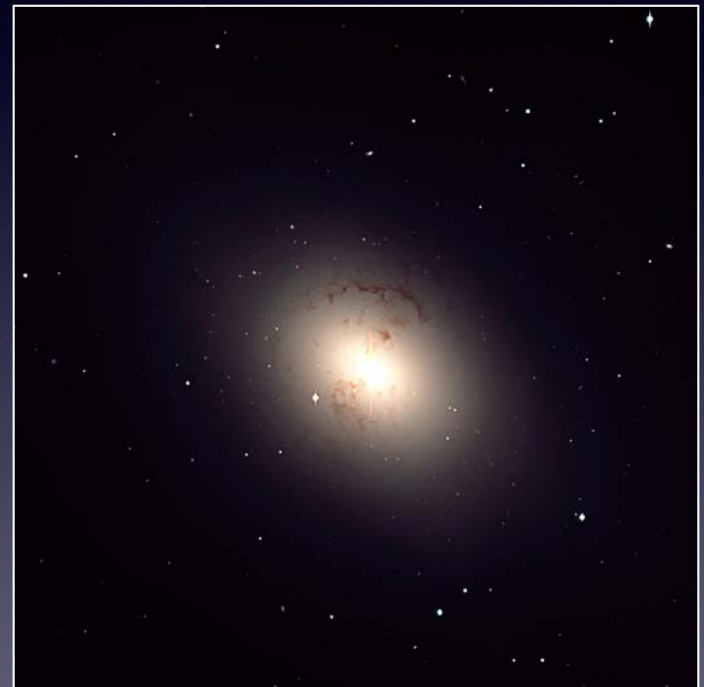
Interacting Galaxies - IC 2184



Merging Galaxies

Galaxies

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



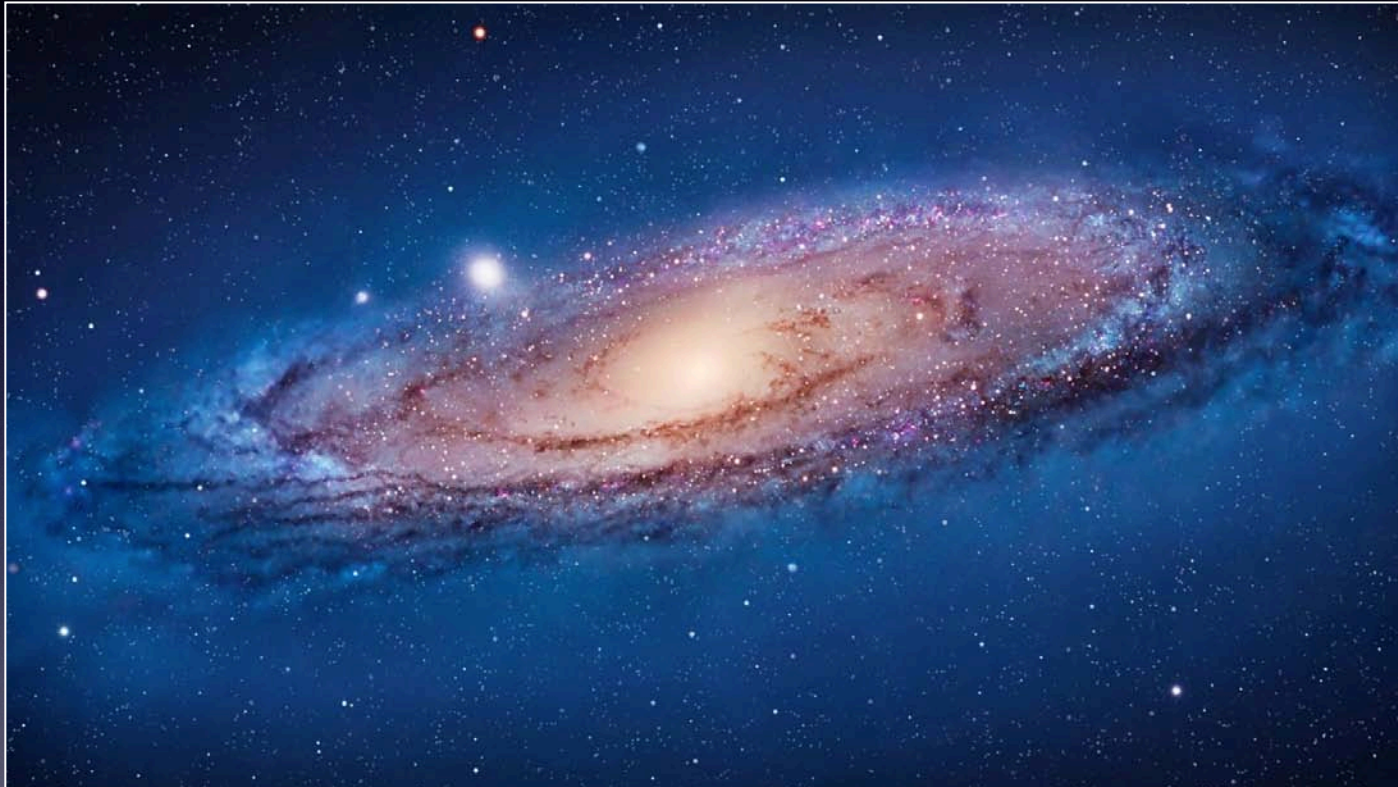
Elliptical Galaxy - NGC 1316

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



Spiral Galaxy - NGC 6753



Andromeda Galaxy - NGC 224

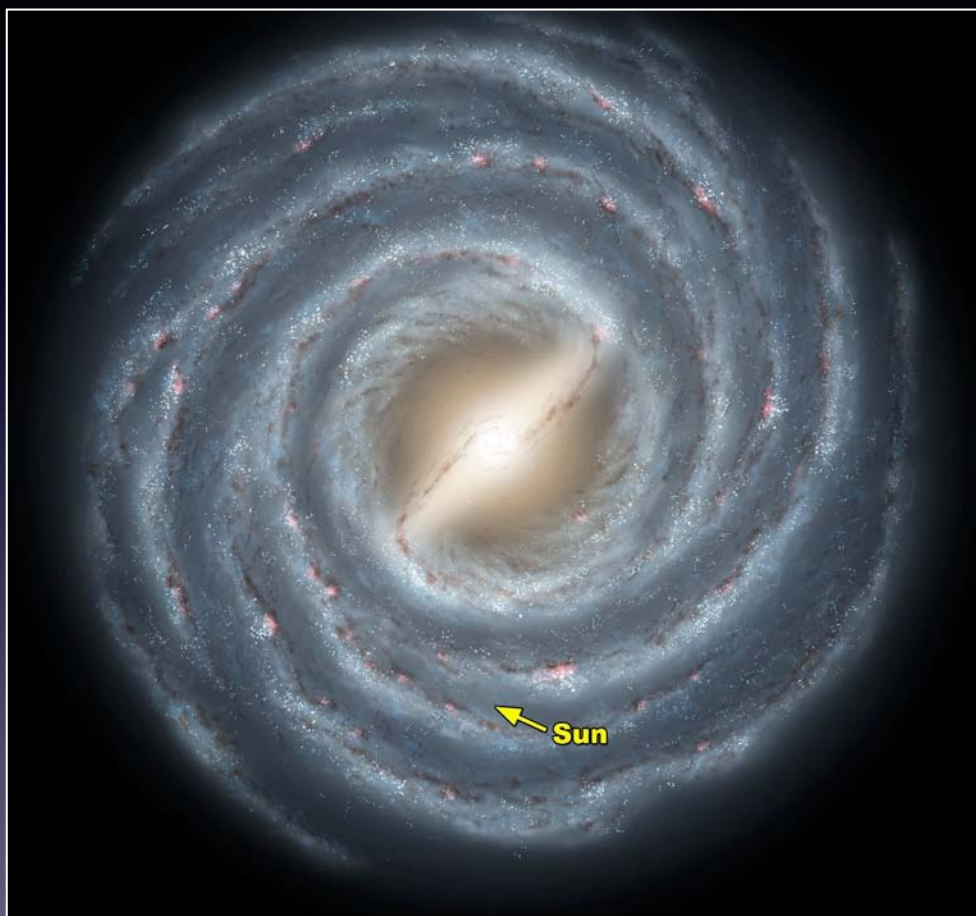
Galaxies

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



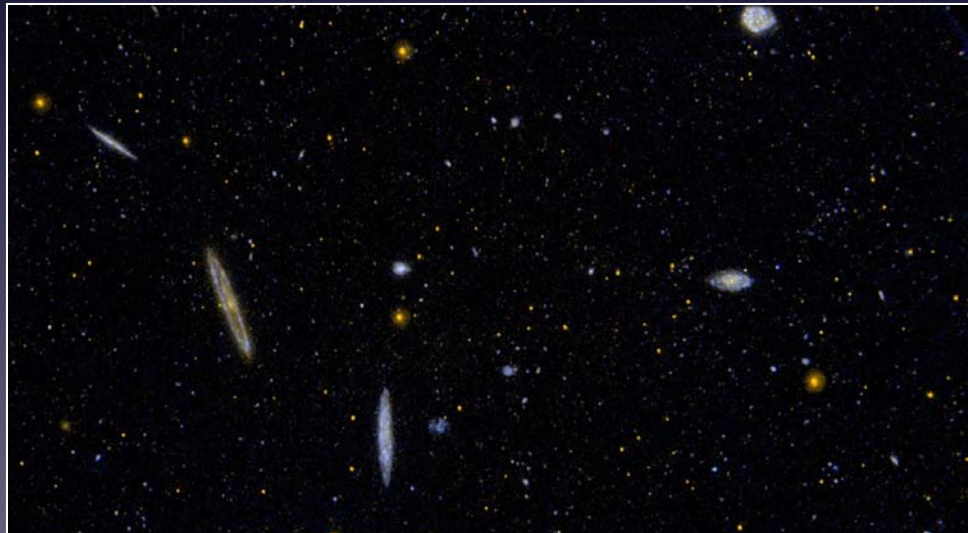


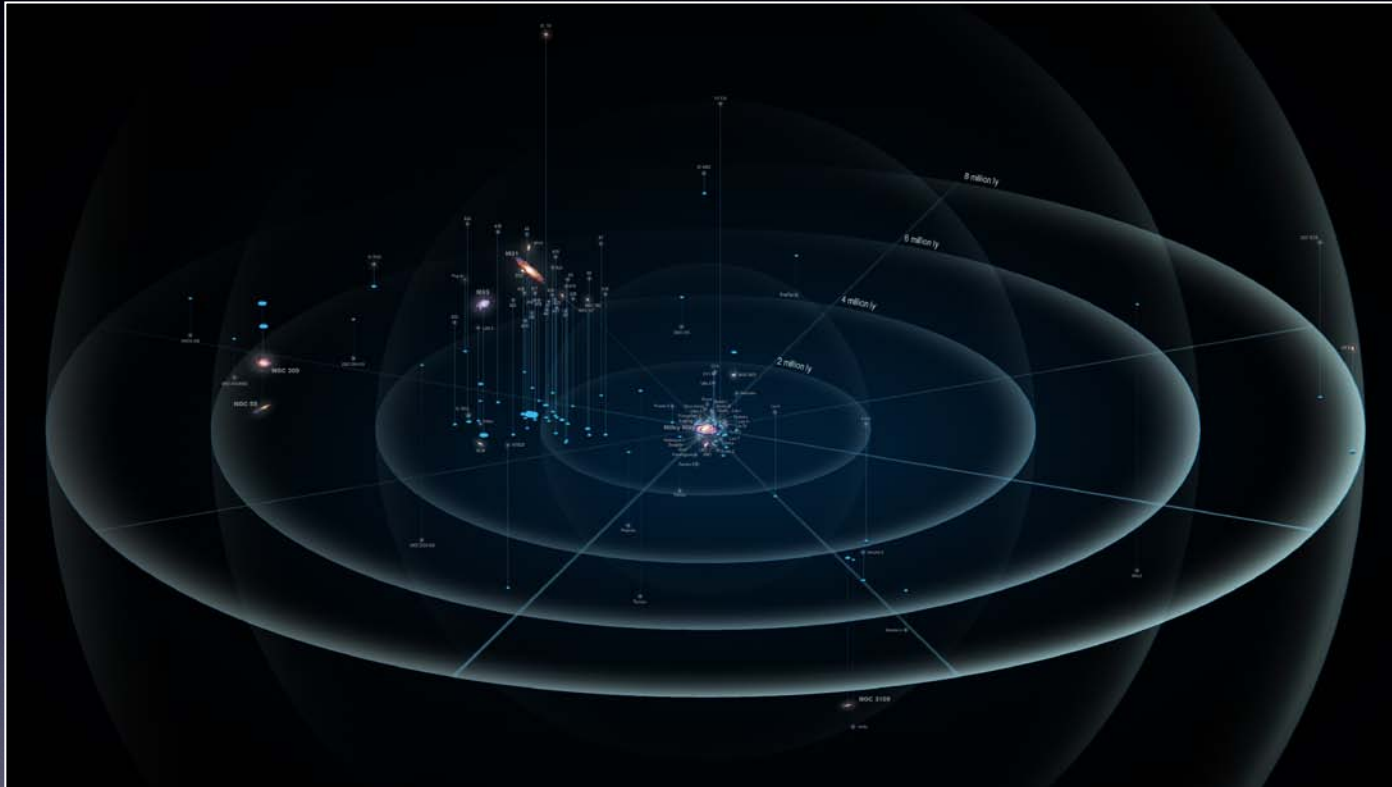
Milky Way Galaxy



Galaxies

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





Local Group of Galaxies