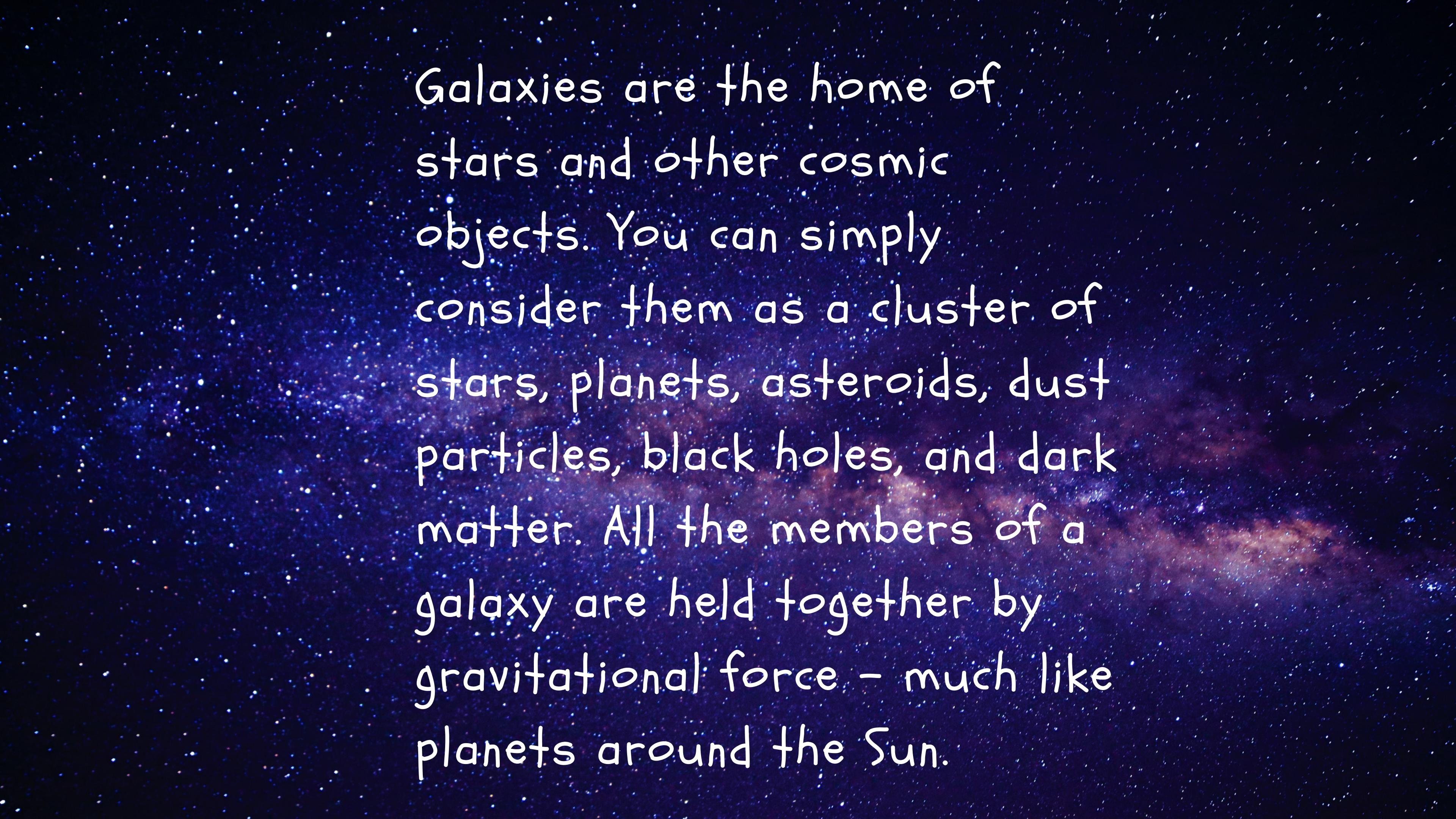


GALAXIES



Galaxies are the home of stars and other cosmic objects. You can simply consider them as a cluster of stars, planets, asteroids, dust particles, black holes, and dark matter. All the members of a galaxy are held together by gravitational force - much like planets around the Sun.

# HOW GALAXIES ARE FORMED?

The formation of first stars in the universe happened around 180 million years after the big bang. Astronomers think that early galaxies were the groups of roughly a million stars. But, how exactly the galaxies were formed is still an open question.

Because there are many factors that took part in the formation of galaxies other than matter. For example, dark matter also took part in the formation and shaping of galaxies. The findings from the Hubble telescope suggest that the early galaxies started to form around 1 billion years after the big bang.

**TYPESTOOLS**  
**GATAXIES**

# ELLIPTICAL GALAXY

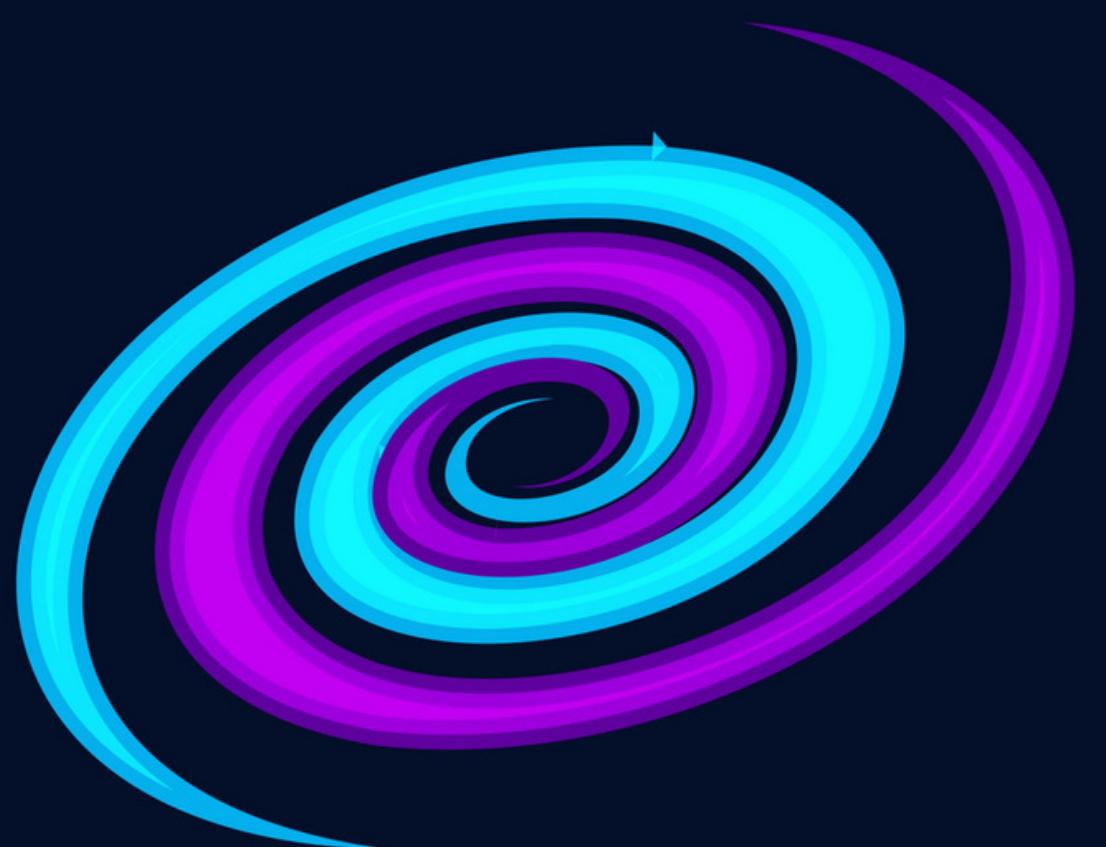


These are the galaxies that come close to the shape of an ellipse. The rate of new star formation is slower in elliptical galaxies as compared to other types.

The typical size of an elliptical galaxy is larger than a spiral galaxy.

# SPIRAL GALAXY

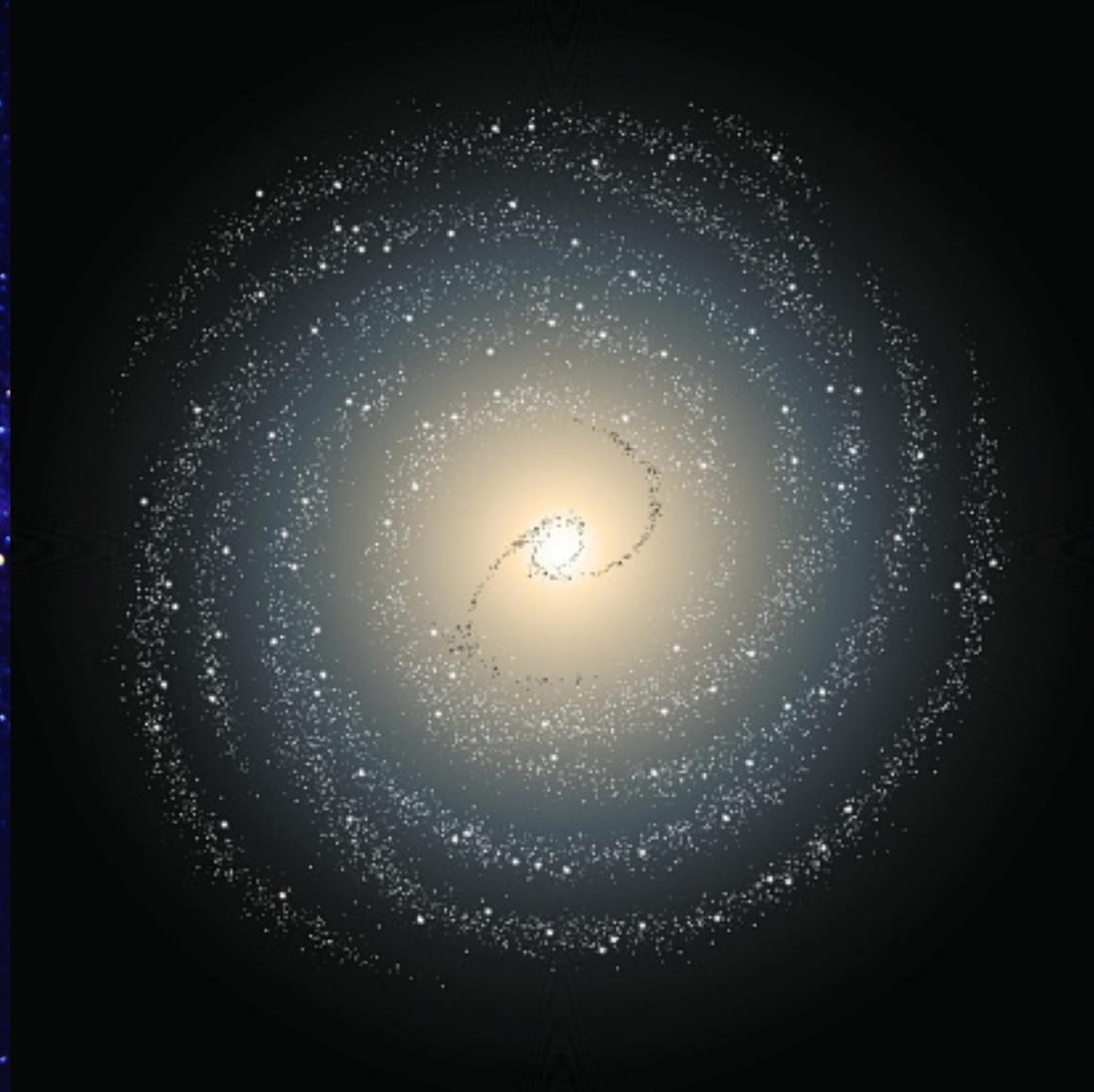
Spiral galaxies are circular in shape and have a center from which spiraling arms begin. The center of a spiral galaxy has mostly older stars as compared to its arms. It is estimated that spiral galaxies have more dark matter than our ordinary matter. The dark matter is considered responsible for keeping the spiral galaxies in shape.



VectorStock®

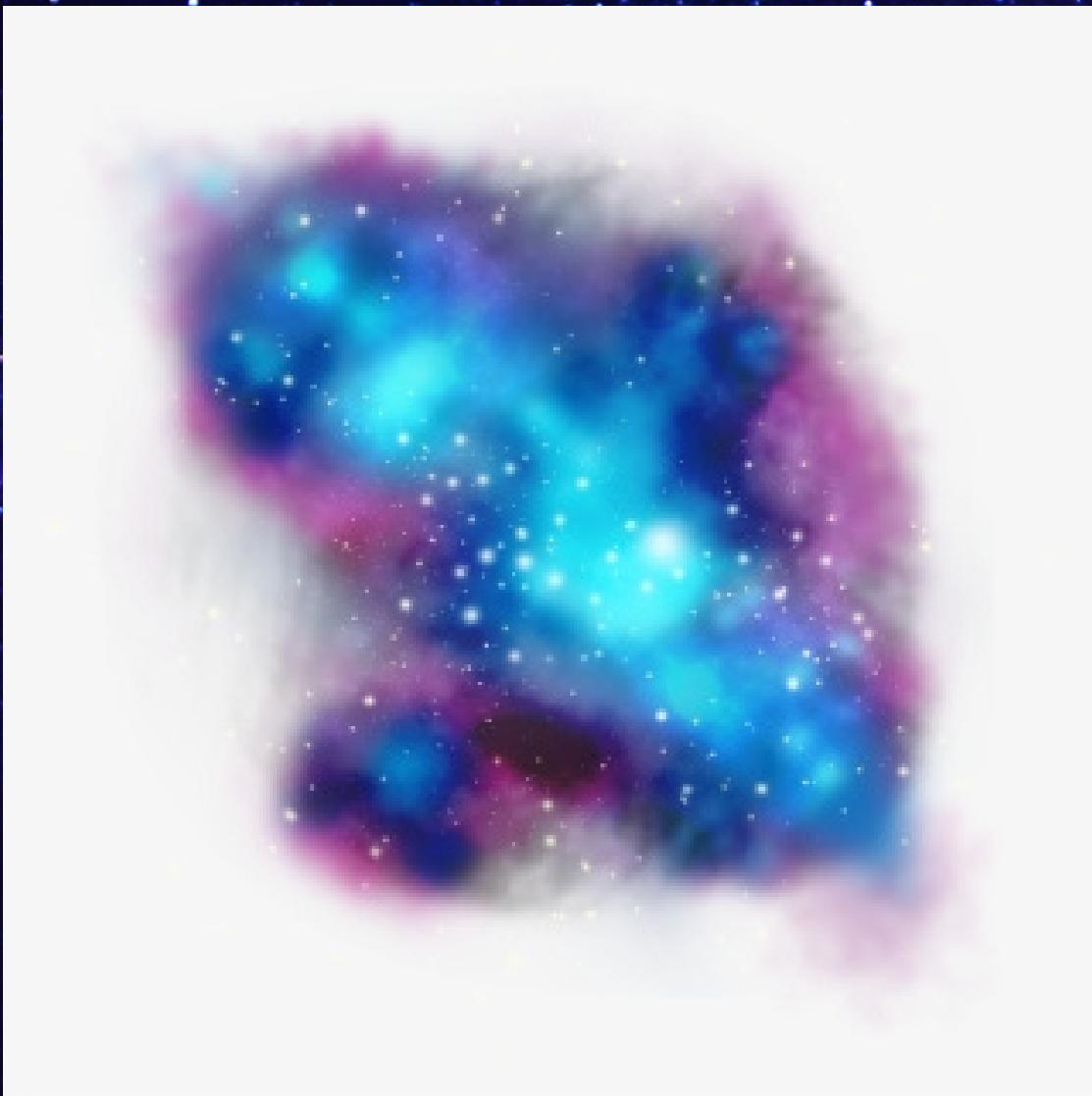
VectorStock.com/9363549

# BARRED SPIRAL GALAXY



These galaxies have a rectangular type of bar in the center, and spiraling arms beginning from the ends of the bar. Our own galaxy, Milky Way, is also barred spiral galaxy.

# IRREGULAR GALAXY



Galaxies that don't fit in the above discussed 3 types are placed in the list of irregular galaxies. Most of the time, irregular galaxies are formed when two galaxies collide with each other.