

11.5: Star Clusters

Stars are often seen to group into what astronomers term as **star clusters**. Star clusters are gravitationally bound groups of stars. There are two major types of star clusters. **Open Clusters (OC)** are groups of young, hot stars that are physically related by being held together by gravity; less than 50 to 100 or more stars. **Globular Clusters (GC)**, or **globulars**, are tight groupings of very old stars; 10,000 to one million or more stars. Open clusters are irregular in shape or pattern, whereas globular clusters are spherical in shape. Open cluster stars can somewhat disassociate with other open cluster star members, since the gravitational attraction thus association with each other is loose and can be affected by other astronomical bodies passing near the OC.

Photographically, the two types of star clusters are easy to tell apart. Open clusters have fewer stars and appear to be not-well organized or symmetrical in shape. Globulars have many, many more stars than open clusters and are symmetrical and spherical in shape.

Open Clusters



Images courtesy of Mike Reynolds, Ph. D. of Florida State College at Jacksonville.

Globular Clusters



Images courtesy of Mike Reynolds, Ph. D. of Florida State College at Jacksonville.

This page titled [11.5: Star Clusters](#) is shared under a [CC BY 4.0](#) license and was authored, remixed, and/or curated by [Lumen Learning](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.