

11.23: The Four Hertzsprung-Russell Diagram Stellar Groups

The H-R Diagram plots stars such that there are four major groups.

The **Supergiants** are cool stars, which are very large and very bright. They are located towards the top right of the graph.

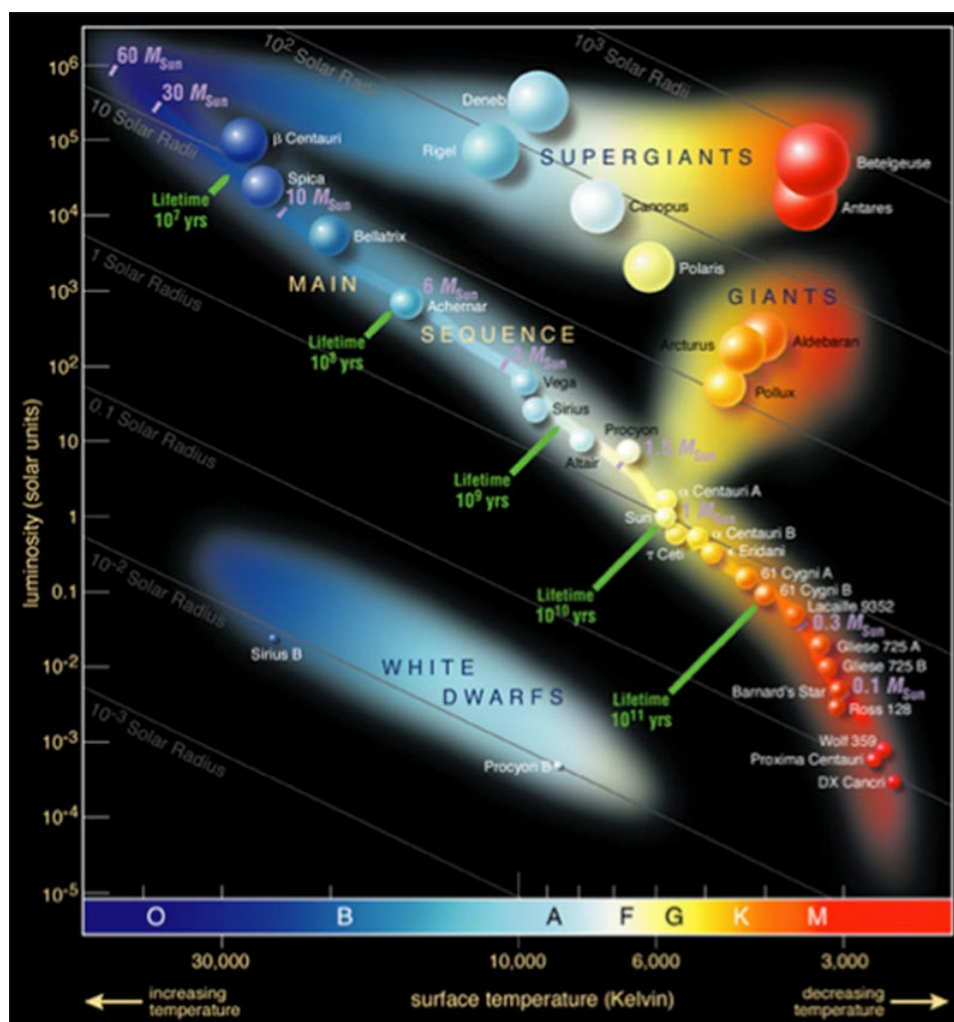
The **Giants** are cool stars, which are a little smaller and dimmer than the Supergiants.

The **White Dwarfs** are very hot stars, which are small in size and relatively dim. They are found in the lower left of the H-R Diagram.

The **Main Sequence** is a band of stars, which includes most of the stars, like our Sun. These are usually smaller stars, often dwarf stars.

The H-R Diagram can also show a star's life, referred to as Stellar Evolution. During the 1930s, it was found for stars with uniform chemical composition, there is a relationship between stellar mass and the star's luminosity and diameter.

Other important derivations of the Hertzsprung-Russell diagram can be used to show different data, for example classes of stars, protostars, brown dwarf objects, or graphs known as color index and color magnitude diagram.



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