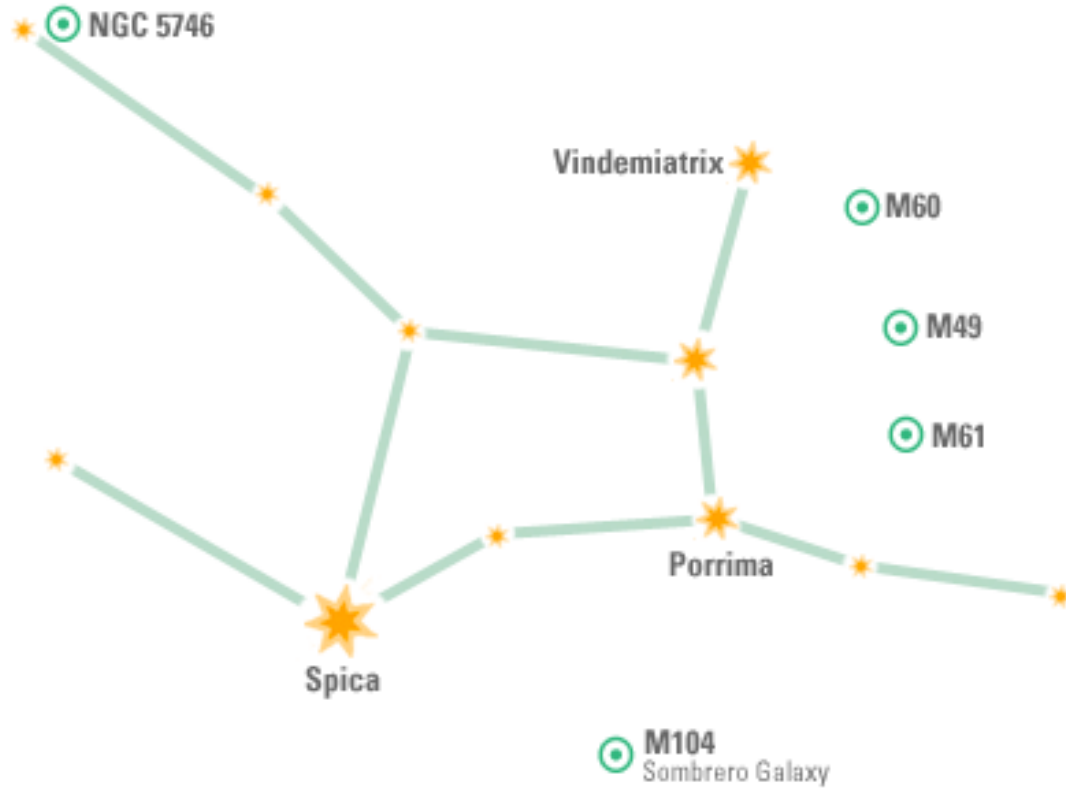




Spica the blue giant

Spica is on the left, Venus is the brightest on the bottom, with Jupiter above.



The constellation Virgo

Spica is the brightest star in this constellation. It is the 15th brightest star in the sky and is located 260 light years from earth, which makes it one of the nearest stars to our sun. Many people throughout history have observed it including Copernicus and Hipparchus.

Facts

- Spica is a binary star system with the primary star at 10x the sun's mass and 7x the sun's radius. It puts out 12,100x the lumens as our sun, placing it in the luminosity range of a sub-giant to giant star. The magnitude reading is +1.04 with a temperature of 22,400 Kelvin. It is a flushed white helium type star. The companion is 7x the sun's mass and has a radius 3.6x as large. The companion is main sequence. The distance between these two stars is 11 million miles. 80% of the light emitted from this area comes from Spica. Spica is also a strong source of x-rays.

Spica is a binary system

- There are up to 3 other components in this star system. The orbit around the barycenter, or common center of mass, is as quick as four days. The bodies are so close we cannot see them apart with our telescopes. We know this because of observations of the Doppler shift in the absorption lines of the spectra. The rotation rate of both stars is faster than their mutual orbital period. This lack of synchronization and ellipticity of their orbit indicate that this is a young star system. Over time, interactions tend to lead to orbit circularization.



Venus

Spica
multiple star
263 light years

Jupiter
with 3 moons

Moon
with Earthshine
3.04 days old

