

Stargazing summer triangle



Deepest summer approaches. Nights are short, more enjoyable. Spring's dim constellations yield to a rich and varied summer sky. The summer triangle dominates this lovely sky; we shall use it to guide our way.

Three bright stars, each belonging to a different constellation, form this gigantic triangle that rises through July. Nearly overhead, the first magnitude star Deneb marks the tail of Cygnus the Swan, as he silently glides down our Milky Way galaxy. Nearby to the southwest is brighter zero magnitude Vega, of Lyra the Harp. Closing the triangle's southeastern corner is Altair, the eye of Aquila the Eagle.

Through mid summer and into mid October, the triangle will be seen slipping slowly off to the west with the change of seasons.

Use the Milky Way, or the line of Cygnus' body (look for a cross shape on the star map) if the dim galaxy is not visible, to bring you to the southern horizon. By mid-July we have our best opportunity to see the gorgeous and twinkling red super giant Antares, the heart of Scorpius. Antares—the name literally means the rival of Ares, or Mars—marks the heart of the great Scorpion. Greeks saw the first magnitude star as Mars' rival since the planet passes close to Antares on its journey along the ecliptic.

Slightly to the east of Scorpius lies Sagittarius the Archer. You will spot its asterism (a star shape that is not an entire constellation) known as the teapot, pouring out the Milky Way. Gazing in this direction, you are looking 50,000 light years in the direction of the center of our galaxy, and the untold mystery of its central black hole.

There are few planets this month to complete our serene night journey. By the time it is dark enough to see a nice star field, all but Jupiter will have set. Take the time to find bright Jupiter, sitting in the spring constellation Virgo to the southwest. With a telescope or even large binoculars you will be able to see what Galileo spotted first in 1610: the planet's red spot, and at least 4 of its 60-plus known moons. Galileo used this model of a mini solar system to help support the Copernican revolution—that wild idea proposed by Nicolaus Copernicus that the sun, not the earth, was at the center of our planetary system! 🌌

—Lisa Daly