May Tonight’s Sky

Pleasant spring evenings are ideal for tracing the legendary patterns of the night sky.

Find the pattern of the Big Dipper—part of Ursa Major, the Great Bear.

Trace past the curve of the Big Dipper’s handle, down through the bright orange star Arcturus, and continue until you come to another bright star: Spica.

Spica is actually a pair of massive blue-white stars.

Spica anchors the constellation Virgo, which dominates the southern sky in May.

Facing Virgo, we are looking away from the crowded, dusty plane of our own galaxy.

In this direction, we have a less obstructed view of the deeper universe, which is brimming with other galaxies.

One of these is a lenticular, or lens-shaped, galaxy known as the Sombrero.

NASA’s Hubble Space Telescope provides a detailed view of the dark lanes of dust ringing the Sombrero Galaxy’s bright core.

Just above the Y-shape in Virgo is a concentration of roughly 2,000 galaxies known as the Virgo Cluster.

One of the largest of these is M87, a giant elliptical galaxy with trillions of stars and a supermassive black hole in its core.

The black hole is emitting a jet of material, faintly visible in this image from Hubble.

An image from a ground-based radio observatory shows that the jet shines very brightly in radio light.

The radio image also shows a turbulent cloud: evidence for a second jet, firing in the opposite direction.

Next to Virgo lies the constellation Coma Berenices—Bernice’s hair.

Tangled in Bernice’s locks are many other distant galaxies—among them the spiral galaxy M64.

M64 is also known as the Black Eye Galaxy for the dark area in its disk.

Hubble shows that the dark region is a large band of dust spinning in the opposite direction of the inner regions, likely as a result of a collision in the galaxy’s past.
Back toward the handle of the Big Dipper sits the small pattern of Canes Venatici, the hunting dogs.

Within the boundaries of this constellation, just below the end star of the Dipper’s handle, telescopes find another faint swirl of light: M51.

Hubble shows M51 as a spectacular face-on spiral—the Whirlpool Galaxy—along with a companion galaxy.

An X-ray image of the companion reveals shock waves caused by outbursts from a supermassive black hole.

Explore the wonders of the May sky, with its familiar patterns, legendary figures, and glittering galaxies.

Celestial wonders await you in tonight’s sky.