

# The Night Sky

## Arcturus Returns to Evening Sky

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After having a variety of astronomical conjunctions over the past few months, we have a relatively quiet month of April. Jupiter now sits behind the Sun; however, Venus is still shining brightly in the evening wester sky. On the nights of April 10<sup>th</sup> and 11<sup>th</sup>, Venus sits just to the left of the Pleiades star cluster in Taurus. The Pleiades, also known as the Seven Sisters, due to its naked-eye 7 brightest stars, sits about 440 light years from our solar system. It is among the nearest and brightest star clusters in the sky.

While viewing Venus during these nights, look down to the lower right of Venus, 45 minutes after sunset. You should easily be able to spot our solar system's innermost planet, Mercury. It reaches greatest elongation from the Sun on the evening of the 11<sup>th</sup>. This evening apparition is the most favorable of the year for Mercury, so if you have never seen this elusive planet, now is the time to catch it!

Mars continues to dim as the Earth pulls away from it, positioned in the middle of the constellation of Gemini throughout the month. On the night of April 25, a waning crescent Moon sits just to right of the red planet.

Saturn is now easy to spot in the east-southeast morning sky. On the morning of April 16<sup>th</sup>, the waning crescent Moon sits less than 5 degrees below the ringed planet. Catch this sight before the bright morning twilight overwhelms this pairing.

April gives rise to the evening reappearance of Arcturus, the 4<sup>th</sup> brightest star in the night sky. It is located in the constellation of Boötes (pronounced "boh-OOH-teez"), and was pictured as a herdsman by the ancient Greeks. This herdsman can be seen driving his great plow, represented by the Big Dipper, in a great circle around the north star, Polaris. Boötes is accompanied with his two trusted hunting dogs, represented by the constellation Canes Venatici located on his right flank. Arcturus is one of my favorite stars since its reappearance in the evening sky is a sign that spring has returned. It is red giant star with a diameter 27 times that of the sun. One can easily find Arcturus by following the curve of the Big Dipper's handle which can be remembered with the astronomy limerick, "Follow the arc to Arcturus." If one continues this path in the sky, one can then find Spica – "then drive a spike to Spica."

April's Full Moon will occur on the 6<sup>th</sup> at 12:34 a.m. EDT. This springtime full Moon was often referred to as the Full Pink Moon by Native Americans. This name comes from the herb pink moss – a wildflower which blooms during the early springtime in North America.

The next astronomy open house at the ETSU observatory is scheduled on Saturday, April 22<sup>nd</sup> from 8 to 10 pm. This marks the last astronomy open house of the season. At these open

houses, the public can view objects in the sky through telescopes and hear talks by faculty of the Physics and Astronomy Department. Make sure you dress warmly, since the evening can still be cold in April. Note that the open houses are cancelled if the sky is cloudy. Further information about these open houses and directions to the observatory can be found on the web at <https://www.etsu.edu/cas/physics/observatory/starparty.php>.

For those of you who would rather explore the night sky indoors, the February 2023 planetarium show will be on April 20<sup>th</sup> at 7:00 p.m. at the ETSU Planetarium in Hutcheson Hall. A location map of the Planetarium on the ETSU campus can be found on the web at <https://www.etsu.edu/cas/physics/outreach/planetarium.php> for further information.

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