The Night Sky

Say Goodbye to Jupiter!

Throughout the spring and early summer, observers were blessed with having the two brightest planets in the evening sky, with a close conjunction between the two occurring on June 9th. Since that conjunction date, Jupiter has been sinking towards the northwestern horizon. The last day for catching the "King of the Planets" before being lost in the solar glare is on July 9th. Note that you will need an unobstructive northwestern horizon to spot Jupiter. Jupiter has its conjunction with the Sun on July 29th. Jupiter will be absent from the sky until August 10th, when it re-emerges from behind the Sun in the morning sky.

This leaves only brilliant Venus in the evening sky for the remainder of the month. On the evening of July 9th, Venus has a close encounter with Leo's brightest star, Regulus. On this evening, it sits less than a degree above Regulus. Regulus, or Alpha Leonis, is the least bright of the first-magnitude stars, with a magnitude of +1.4. Meanwhile, Venus shines at magnitude -4.1, that's nearly 160 times brighter than Regulus!

On July 4th in the morning sky, the Red-Planet Mars has a very close conjunction with the planet Uranus. The pair will only be 7 arcminutes apart from each other! Uranus currently shines at magnitude 5.8, barely naked-eye brightness under extremely dark skies. It is often difficult to spot Uranus against the background stars. However, with the help of bright Mars, it should be easy to spot Uranus just above Mars with binoculars.

Saturn is currently in the morning sky, located near the border of the constellations Pisces and Cetus. You can spot it shining brightly (at a magnitude of roughly +0.8 to +0.9) low above the southeastern horizon two hours before sunrise. Our last planet visible in the morning sky is Mercury, the solar system's innermost planet. It will be very easy to spot during the last week of July, rising some 75 minutes before sunrise. Look for it just above the eastern horizon.

The Moon will reach full phase on July 29th at 10:36 a.m. EDT. The July Full Moon is known as the Full Buck Moon by many Native Americans, because male deer begin to grow their new velvety antlers at this time.

The ETSU Powell Observatory open houses are on hiatus until September. Later this summer, the 2026-2027 schedule for our Astronomy open houses can be found on the web at https://www.etsu.edu/cas/physics/observatory/starparty.php.

The ETSU planetarium shows are also on hiatus until September. The 2026-2027 schedule will be posted on the web later this summer at https://www.etsu.edu/cas/physics/outreach/planetarium.php.

This month's Night Sky was written by Dr. Donald G. Luttermoser, Chair of the Department of Physics and Astronomy at ETSU. He can be reached at lutter@etsu.edu. Any students wishing to pursue a career in Physics or Astronomy are encouraged to contact him at this email address. Astronomy-related information for the public, including a link to the ETSU Powell Observatory, can be found at https://www.etsu.edu/cas/physics/ by selecting the Public Outreach pull down menu on the lower-left side of this web page.