

The Night Sky

Brilliant Jupiter Dominates the Evening Sky

Sunset is occurring earlier and earlier as the month progresses. Jupiter continues putting on a great show as it dominates the evening sky. At the beginning of the month, Jupiter rises two hours after sunset in the northeast, and by month's end it is already dazzling in the east as twilight fades. Jupiter is in the constellation of Taurus, very near to the red giant star Aldebaran. Should you get a chance to view Jupiter through a telescope, it appears very large in the eyepiece at 100 power. Its atmospheric belts are easy to spot, as is the four Galilean moons of Jupiter. These are called the "Galilean" moons since Galileo was the first to spot them in 1609 when he first pointed a telescope to the heavens. On November 1st, Jupiter shines close to the waning gibbous moon, and then on November 28th, Jupiter will be very close to the upper left of the just-past-full moon.

While Jupiter is putting on a great show in the eastern evening sky, fading Mars continues its rapid movement against the background stars in the western evening sky. Reddish Mars will be leaving the constellation of Scorpius and begin racing through Sagittarius this month. This planet is starting to get hard to spot since it will only be about 10-degrees above the southwest horizon 45 minutes after sunset.

Unfortunately, one will have to wait until the early morning to be able to see the other bright planets. However, for those early morning viewers, Venus and Saturn put on a show. Since the planets Venus and Mars are typically our two closest planets in the solar system, each can move fairly rapidly on the sky with respect to the background stars. Venus shines as the brilliant "Morning Star" rising 3 hours prior to the sun at the beginning of the month. However during this month, Venus races through the constellation of Virgo passing the bright star Spica and moving towards planet Saturn. On November 26th a few hours before dawn, watch Venus make a close approach to Saturn on the sky. Approximately 45 minutes before sunrise, Venus will be less than a degree from Saturn in the brightening twilight. One can really appreciate how quickly Venus moves on the sky by noting its location with respect to the slower moving Saturn during the last few weeks of November. During the last week of November, Mercury also can be seen in the morning twilight to the lower right of Venus.

About 3 hours before sunrise on November 17th, one might be able to spot some meteors associated with the Leonid meteor shower. This shower is normally weak, but occasionally the Leonids can put on a fantastic show. The moon will be full in the early morning of November 28th. According to folklore, the November full moon is known as the beaver or frost moon. Finally, Daylight-Savings Time ends at 2 a.m. on November 4th – make sure you move your clocks back by one hour.

Should the sky be clear the night of November 17th, there will be a free public astronomy open house at the ETSU Powell Observatory from 8 to 10 p.m. 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. 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 <http://www.etsu.edu/cas/physics/observatory/default.aspx>.

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