

The Night Sky

Venus Departs the Evening Sky

During the past few months, Venus has been dazzling northern hemisphere viewers in the evening sky. Venus is at its greatest brilliancy and virtually as far north as it can get in the sky just northwest of the summer solstice point on the sky at the beginning of May. As the month progresses, Venus will get lower and lower in the evening northwest sky when viewed at the same time after sunset as it races towards its rendezvous with the sun on June 5th. Next month The Night Sky article will cover the details of this last Venus transit of the sun for the next 105 years. Each day the disk of Venus will get larger as Venus races between the earth and sun. During the last week of May, low hanging Venus's crescent should be easily seen with binoculars, and may even be visible to people with good eyesight. However, be careful **not** to look at the sun if you should try to view Venus before the sun sets.

Mars is high up in the southern sky at sunset as May opens in the constellation of Leo just 6° east of the bright star Regulus. The red planet will be interesting to watch this month as it quickly picks up speed on the celestial sphere moving further east of Regulus. At month's end, Mars will have moved 15° away from Regulus. Every few days go out and note the new position Mars with respect to Regulus. Both the relatively quick motions of Venus and Mars this month with respect to the background stars makes one appreciate the dynamic nature of the solar system.

The last planet visible in the night sky this month is Saturn located in the constellation of Virgo just 5° northeast of the bright star Spica. Saturn will be high in the southeast sky at dusk at the beginning of May. By month's end, Saturn will be due south at the end of evening twilight about half way up from the horizon to the zenith (the point on the sky overhead). Saturn's rings have been opening up over the past few years making an impressive sight through a telescope. Mercury may be visible through binoculars low in the eastern sky just before sunrise during the first week of May, but gets lost in the solar glare for the remainder of the month. Jupiter is directly behind the sun on May 13th and rises only about 45 minutes before the sun by the end of the month.

The moon is at full phase on the evening of May 5th. This full moon occurs two minutes after the moon reaches a relatively close perigee (closest point to the earth) in its elliptical orbit. As a result, this full moon will be the largest in the sky for 2012. Native Americans called the full moon of May the "Full Strawberry Moon" since strawberries are harvested during this month. Meanwhile, early Europeans referred to May's full moon as the "Rose Moon." Whereas Venus will transit the sun next month, the moon will transit the sun (a solar eclipse) on May 20th. However, this eclipse will not be visible in Tennessee and will be annular due to the fact that the moon will be near apogee (farthest point from the earth). Annular eclipses occur when the moon does not fully cover the sun due to the moon having a smaller angular size than the sun.

The ETSU Powell Observatory open houses are on hiatus for the summer. They will resume in the fall.

This month's Night Sky was written by Dr. Donald G. Luttermoser, Chair of the Department of Physics and Astronomy. He can be reached at lutter@mail.etsu.edu. Astronomy-related information for the public, including a link to the ETSU astronomy open houses, can be found at <http://www.etsu.edu/physics/astronomy.htm>.