

The Night Sky

Farewell Jupiter, Welcome Saturn

The night sky in the evenings this April continues to be a showcase for the bright planets, though as the month progresses; Jupiter gets lower and lower in the western sky. Jupiter sets 2½ hours after the sun on April 1st but only ¾ hour on April 30th as the quicker moving earth moves to the far side of the sun as seen from Jupiter. The separation between Jupiter and Venus continues to increase throughout the month after their close pairing in the sky in mid-March. Venus rules the evening sky this month reaching greatest brilliancy by month's end and setting nearly 4 hours after sunset throughout most of the month. Venus will be very close to the Pleiades (sometimes called "the seven sisters") star cluster in Taurus the first week of April. One should be able to see the entire cluster and Venus in the same field-of-view through binoculars. It will be a very pretty site even with the naked-eye.

While Venus is dazzling the western evening sky, fading reddish Mars is still bright in the eastern evening sky as it moves through the constellation of Leo. Mars will be very close to bright star Regulus in Leo at mid-month. Mars is the brighter and redder of these two celestial objects. The planet Saturn reached opposition (opposite from the sun on the sky) on April 15th and makes its reappearance in the evening skies. Like Mars, Saturn is also close to a bright star this month, though in this case it is the star Spica in Virgo. Saturn will appear about twice as bright as Spica. Mercury will be in the morning sky just before sunrise at mid-month but will not be easy to see since it rises less than an hour before the sun.

April also gives rise to the evening reappearance of the Arcturus, the 4th brightest star in the night sky. 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."

The moon appears close to Mars and Regulus the nights of April 2nd and 3rd, then again on April 30th during the following lunar cycle. The moon forms a compact straight line with Saturn and Spica on April 6th. A very slender crescent moon shines just above Jupiter very low in the west at dusk on April 22nd. On the next night, the crescent moon passes between the Hyades and Pleiades star clusters in Taurus, then on April 23rd resides between Venus and the bright star Aldebaran in Taurus. The moon is at full phase on Friday, April 6th (Good Friday). Note that the Easter holiday occurs on the first Sunday, after the first full moon, after the vernal equinox (i.e., first day of spring). The full moon in April has many names including the Full Pink Moon (from the herb moss pink, or wild ground phlox, which is one of the earliest widespread flowers of the spring), the Full Spouting Grass Moon, the Egg Moon, and the Full Fish Moon (since some species of fish spawn this time of year).

The next free public astronomy open house at the ETSU Powell Observatory will occur on March 31st from 8:00 to 10:00 p.m. This marks the last astronomy open house until the fall. 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. Additional 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>.

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