The Night Sky

Bright Planetary Quartet in Morning Sky

All of the bright planets are visible in the early morning sky except Jupiter, which lies behind the Sun this month and is lost in the solar glare. However, Mercury, Venus, Mars, and Saturn can be spotted rising before the Sun during the first few days of March. On March 2nd, Saturn and Mercury experience a very close conjunction very low (about 3-degrees) above the southeast horizon 30 minutes before sunrise. These two planet will be separated by less than a degree-of-arc (about 2 Moon diameters) on this date. You will need an unobstructive flat field to spot this low pair. Mercury is the brighter of the two, lying to the lower right of Saturn. After this date, Mercury becomes lost from view as it plunges into the solar glare.

Meanwhile on this date, Venus and Mars lie to the upper right of the Saturn/Mercury pair, with the much brighter Venus lying about 6 degrees above Mars. As the month progresses, the separation between Venus and Mars shrinks until the closest separation of 4 degrees on March 15th. During this month, Venus is slowly getting lower as Mars slowly rises above the southeastern horizon. On the morning of March 28th, Venus, Saturn, and Mars form an isosceles triangle with a waning crescent Moon sitting below this planetary triplet.

In the evening sky on March 15th, the waxing gibbous Moon passes in front of the star Eta Leonis, which lies to the upper-left of Regulus, the brightest star in Leo. This eclipse, or occultation, begins around 7 p.m. EDT and will last approximately an hour. Astronomers use these stellar occultations by the Moon as a means of measureing the diameter of the star as the lunar limb passes over the star.

Daylight Savings Time starts at 2 a.m. on Sunday, March 13. A week later on March 20th, spring begins at 11:33 a.m. EDT. At this time, the Sun is located on the vernal equinox on the celestial sphere and located in the sky directly over the Earth's equator.

The Moon will be at full phase 3:18 a.m. EDT on March 18th, two days before the vernal equinox. March Full Moons are known by a variety of names by native Americans, including the Full "Worm Moon," "Crow Moon," "Sap Moon,", and "Lenten Moon."

The ETSU Powell Observatory open houses are on hiatus until further notice. Once the current health crisis is over, the schedule for our Astronomy open houses can be found on the web at https://www.etsu.edu/cas/physics/observatory/default.php.

However, the ETSU Planetarium Shows may take place this spring semester depending on the status of the pandemic. Please check the Planetarium web page at https://www.etsu.edu/cas/physics/outreach/planetarium.php for further information.

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 http://www.etsu.edu/cas/physics/ by selecting the Public Outreach pull down menu at the top of this web page.