The Night Sky

Planetary Conjunctions in the Morning Sky

Venus is a dazzling sight in the evening sky all throughout March. Our sister planet reaches its greatest eastern elongation from the sun on March 24th. Venus will remain visible for over 4 hours after sunset this month. During the last week of the month, watch Venus approach the Pleiades open star cluster in Taurus. Venus will have a very close conjunction with the Pleiades during the first week of April.

The ``real'' planetary show will occur during the early morning hours during the last half of March. Mars, Jupiter, and Saturn will experience a very tight grouping low in the southeastern sky. Rapid moving Mars passes just below Jupiter on the morning of March 20th, then Mars passes just below Saturn on the last day of the month. In between these dates, the order of these planets from east to west is Saturn, Mars, then Jupiter. Throughout March, Mars brightens significantly as it approaches a very close opposition with earth on October 13th later this year. From March 17th to 19th, the moon joins this planetary trio making for a beautiful celestial sight!

Standard Time ends and Daylight Savings Time begins at 2 a.m. on March 8th – make sure to move your clocks forward by one hour before you go to bed on the 7th. Spring begins when the sun crosses the vernal equinox at 11:50 p.m. EDT on March 19th, a day or two earlier than normal due to this being a ``leap year''. The vernal equinox is the point on the sky where the sun crosses the celestial equator moving from the southern hemisphere into the northern hemisphere of the celestial sphere.

The moon will be at full phase at 1:48 p.m. EDT on March 9th. This full moon will be the first of 3 "supermoons" for the year – the others occurring in April and May. We call such a full moon a supermoon when the full moon occurs within a day of the moon being at perigee, the closest point the moon reaches in it orbit about the earth. The moon is at perigee around 2 a.m. EDT on March 10th. The full moon appears brighter and larger than normal on supermoon dates. Full moons in the month of March are known as the "Full Worm Moon" by Native Americans, since worms become very active in the moist ground during this month.

The next free public astronomy open house at the ETSU Powell Observatory will occur on Saturday, February 29th starting at 8 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. Make sure you dress warmly since you will be standing outside to look through our telescopes. Further information about these open houses and directions to the observatory can be found on the web at https://www.etsu.edu/cas/physics/observatory/default.php.

For those of you who would rather explore the night sky indoors, the next planetarium show occurs on March 19th at 7:00 p.m. at the ETSU Planetarium in Hutcheson Hall. A location map

of the Planetarium on the ETSU campus can be found on the web 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 http://www.etsu.edu/cas/physics/ by selecting the Public Outreach pull down menu at the top of this web page.