## The Night Sky

## **Lunar Eclipse Dazzles the Sky**

The Full Moon will be passing into the Earth's shadow on the night of March 13-14. The Moon will be at full phase at 2:55 a.m. EDT on the morning of March 14<sup>th</sup>. The partial eclipse begins at 1:09 a.m., with totality lasting from 2:26 a.m. until 3:32 a.m. EDT on this morning. Mid-eclipse occurs at 2:59 a.m. The Moon completely leaves the Earth's shadow at 4:48 a.m.

We have a unique situation involving the Moon and Venus – two conjunctions in the same month! The first occurs in the evening of March 1<sup>st</sup>. This conjunction will occur very low in the western sky during the evening twilight, with the waxing lunar crescent sitting just to the lower left of Venus. As a bonus, if you have a reasonably unobstructed western horizon, you might be able to spot Mercury too, sitting 10-degrees to the lower right of the Moon. The second Moon-Venus conjunction appears in the morning sky on March 27<sup>th</sup>. However, this conjunction will not be as close as the March 1<sup>st</sup> conjunction.

On the evening of March 8<sup>th</sup>, Mercury reaches greatest eastern elongation from the Sun and should be very easy to spot sitting above the western horizon 45 minutes after sunset. On this same evening, if you look overhead, you will see a very close conjunction between the red-planet, Mars, and the 75%-illuminated gibbous Moon. They will be less than 1½-degrees apart!

All throughout the month, we are graced with two additional bright planets in the evening sky, brilliant Jupiter, which is currently residing in the constellation of Taurus, and Mars, which sits to the south of Gemini's two brightest stars, Pollux and Castor.

Saturn's rings will appear edge-on from Earth this month, making them appear nearly invisible due to their thinness. This phenomenon is known as a ring plane crossing, which occurs when the Earth crosses Saturn's "ring plane" as it orbits the Sun. Saturn's rings are tilted relative to its orbit, and twice during its 29.5-year orbit, they align with our line of sight. The rings are so thin (less than a mile thick) that when viewed edge-on, they reflect very little light and become difficult to see with even a small telescope. Saturn is currently visible in the early morning sky in the constellation of Pisces.

Daylight-Savings Time starts at 2 a.m. on March 9<sup>th</sup>. Make sure you "spring" you clocks forward by one hour when you go to bed on Saturday the 8<sup>th</sup>.

The ETSU Powell Observatory next astronomy open house will be on March 1<sup>st</sup> from 8 until 10 p.m. EST. 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. The 2024-2025 schedule for our Astronomy open houses can be found on the web at https://www.etsu.edu/cas/physics/observatory/starparty.php.

For those of you who would rather explore the night sky indoors, a planetarium show will be presented on March 20<sup>th</sup> at 7:00 p.m. at the ETSU Planetarium in Hutcheson Hall. Please check the Planetarium web page at <a href="https://www.etsu.edu/cas/physics/outreach/planetarium.php">https://www.etsu.edu/cas/physics/outreach/planetarium.php</a> for further information

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