The Night Sky

Lunar Eclipse at Mid-Month

On the first day of the month, the two brightest planets in the night sky are still close together in the night sky, a day after their very close conjunction. This May 1st pairing has Venus and Jupiter only 33 arcminutes apart. One will be able to see both planets in the same field of view with a low-power telescope. While you're looking at this dazzling pair, note that Venus is the brighter of the two. As the month progresses, Venus pulls away from Jupiter very quickly as it sinks lower in the eastern sky.

Keep your eye on Jupiter this month, and watch the separation between the King of the Planets and the Red Planet shrink. On the early morning of May 29th, Jupiter and Mars have a very close conjunction, separated by only 35 arcminutes. Unlike the Venus-Jupiter conjunction at the beginning of the month, this time Jupiter is the brighter of the two. This is the second consecutive month that we have had a close planetary conjunction at the beginning of the month and then again near the end of the month. Quite a treat for naked-eye observers.

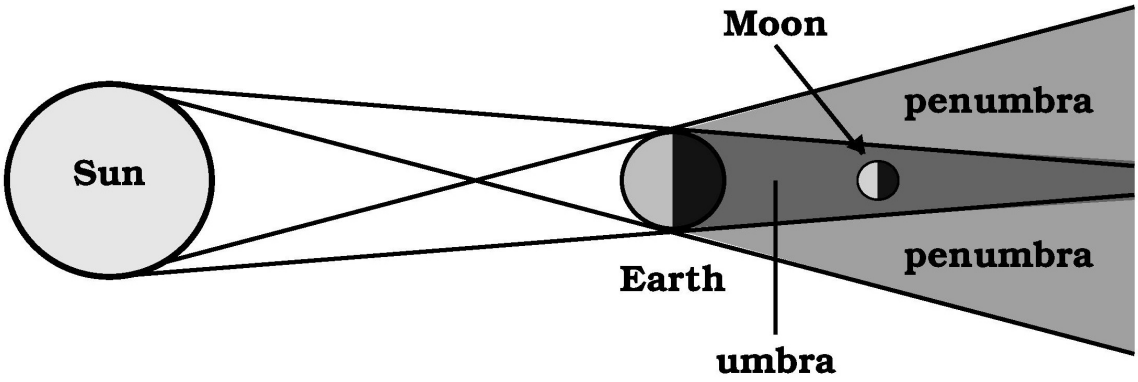
Meanwhile in the evening sky, the innermost planet of the solar system is well placed for easy viewing. On May 2nd above the west-northwest horizon, a thin crescent Moon, Mercury, and the Pleiades star cluster form a straight line. This should make for a very photogenic arrangement, so go out and see what you can record with your cell-phones.

On the night of May 15th, the eastern half of the United States will be able to watch a total eclipse of the Moon from start to finish. The Moon will venture deep into the dark umbra of the Earth's shadow and stay completely eclipsed for 85 minutes. The partial phase begins at 10:28 p.m. EDT when the Moon starts to enter the Earth's umbral shadow. At 11:29 p.m., totality begins as the Moon completely resides in the Earth's umbral shadow. Totality lasts until 12:54 a.m. May 16th when the Moon starts moving out of the Earth's umbra. The partial phase then diminishes until it ends at 1:56 a.m. Mid-eclipse takes place at 12:12 a.m. EDT. Since lunar eclipses occur at the Moon's Full Phase, this eclipse will be known as a Flower Moon Eclipse, since Native Americans called the May Full Moon the "Full Flower Moon" due to the fact that many flowers bloom in May.

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 are taking place this spring semester. 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 on the lower-left side of this web page.



Schematic of a total lunar eclipse.