

The Night Sky

Evenings with the Gas Giants

The two large gas-giants planets of our solar system, Jupiter and Saturn, shine brightly in the evening sky. Unfortunately, as always is the case for summer planets in the evening sky, both appear very low in the southern sky with Jupiter being to the upper left of the red supergiant star Antares in Scorpius, and Saturn residing to the left side of the “teapot asterism” of Sagittarius. During this month of August 2019, the moon has a close encounter with these two planets. On August 9th, a waxing gibbous moon is just to the upper-left of Jupiter, then on the 11th, the moon lies to the right of the ringed-planet Saturn.

Mercury will present its best morning apparition of the year this August. The solar system’s innermost planet rises about an hour before the sun during the first few days of the month. On August 9th, Mercury reaches greatest western elongation from the sun, rising about 90 minutes prior to sunrise. Mercury will continue to brighten throughout the month, but as the separation between Mercury and sun shrinks during the last half of the month, Mercury becomes lost in the solar glare by August 26th.

The two closest planets to the earth, Venus and Mars, will not be visible during August due to their proximity to the sun. Mars will not be seen again (in the morning sky) until mid-October. Venus however returns to the evening sky by mid-September.

The ETSU Powell Observatory open houses are on hiatus until September. Later this summer, the 2019-2020 schedule for our Astronomy open houses can be found on the web at <https://www.etsu.edu/cas/physics/observatory/default.php>. In addition, the monthly planetarium shows will be on hiatus until September as well. Check the Planetarium web site at <https://www.etsu.edu/cas/physics/outreach/planetarium.php> in August to get the schedule for the 2019-2020 Academic Year.

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.